

# **FLYLEAF**

# Article: 8275 Elastica van Gieson staining kit

# for microscopy

Date of compilation: 2021-10-25

# Composition/information on ingredients

## **Bill of materials**

Name of substance	Identifier	Num ber of piece s	Classification acc. to GHS	Pictograms	Page
Hematoxylin solution A acc. to Weigert	Article number X906	1	Flam. Liq. 2 / H225 Eye Irrit. 2 / H319 STOT SE 3 / H336		5 – 20
Hematoxylin solution B acc. to Weigert	Article number X907	1	Met. Corr. 1 / H290 Skin Irrit. 2 / H315 Eye Dam. 1 / H318		21 - 35
Van Gieson's Solution	Article number 3925	1			36 - 47
Resorcinol-Fuchsin solution according to Weigert	Article number X877	1	Flam. Liq. 2 / H225 Met. Corr. 1 / H290 Skin Irrit. 2 / H315 Eye Dam. 1 / H318 STOT SE 1 / H370 STOT SE 3 / H336		48 - 67

Australia (en) Page 1 / 4



# Article: 8275 Elastica van Gieson staining kit

#### 2 Hazards identification

#### 2.1 Label elements

Signal word Danger

Labelling according to Regulation (EC) No 1272/2008 (CLP)

#### **Pictograms**

Danger.









#### Hazard statement(s)

H225 Highly flammable liquid and vapour

H290 May be corrosive to metals H318 Causes serious eye damage

H336 May cause drowsiness or dizziness

H370 Causes damage to organs (eye) (if swallowed)

## **Precautionary statements**

#### **Precautionary statements - prevention**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking

P260 Do not breathe dust/fume/gas/mist/vapours/spray

#### **Precautionary statements - response**

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing

P370+P378 In case of fire: Use sand, carbon dioxide or powder extinguisher for extinction

#### **Precautionary statements - storage**

P403+P233 Store in a well-ventilated place. Keep container tightly closed

P403+P235 Store in a well-ventilated place. Keep cool

# 3 Transport information

#### 3.1 UN number

UN RTDG UN 2924

IMDG-Code UN 2924 ICAO-TI UN 2924

3.2 UN proper shipping name

**UN RTDG** FLAMMABLE LIQUID, CORROSIVE, N.O.S. IMDG-Code FLAMMABLE LIQUID, CORROSIVE, N.O.S.

ICAO-TI Flammable liquid, corrosive, n.o.s. Technical name 2-Propanol, Iron(III) chloride

3.3 Transport hazard class(es)

UN RTDG 3 (8)

IMDG-Code 3 (8)

Australia (en) Page 2 / 4



# Article: 8275 Elastica van Gieson staining kit

ICAO-TI 3 (8)

3.4 **Packing group** 

> **UN RTDG** II IMDG-Code II ICAO-TI II

3.5 **Environmental hazards** non-environmentally hazardous acc. to the dan-

gerous goods regulations

3.6 Special precautions for user

There is no additional information.

3.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

The cargo is not intended to be carried in bulk.

3.8 Information for each of the UN Model Regulations

Transport informationNational regulationsAdditional information(UN RTDG)

**UN number** 2924

**Proper shipping name** FLAMMABLE LIQUID, CORROSIVE, N.O.S.

3 Class 8 Subsidiary risk(s) II **Packing group** Danger label(s) 3+8





**Special provisions (SP)** 274 UN RTDG

**Excepted quantities (EQ)** E2

**UN RTDG** 

Limited quantities (LQ)

**UN RTDG** 

International Maritime Dangerous Goods Code (IMDG) - Additional information

Proper shipping name FLAMMABLE LIQUID, CORROSIVE, N.O.S.

Particulars in the shipper's declaration UN2924, FLAMMABLE LIQUID, CORROSIVE,

N.O.S., (2-Propanol, Iron(III) chloride), 3 (8), II,

<23°C c.c.

Marine pollutant

Danger label(s) 3+8





Special provisions (SP) 274 Excepted quantities (EQ) E2 Limited quantities (LQ) 1 L **EmS** F-E, S-C Stowage category В

Australia (en) Page 3 / 4



# Article: 8275 Elastica van Gieson staining kit

## International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Proper shipping name Flammable liquid, corrosive, n.o.s.

Particulars in the shipper's declaration UN2924, Flammable liquid, corrosive, n.o.s., (2-Propanol, Iron(III) chloride), 3 (8), II

3+8 Danger label(s)





Special provisions (SP) А3 E2 Excepted quantities (EQ) Limited quantities (LQ) 0,5 L

Australia (en) Page 4 / 4

acc. to Safe Work Australia - Code of Practice

#### Hematoxylin solution A acc. to Weigert for microscopy

article number: X906 date of compilation: 2016-12-08 Version: GHS 3.0 en Revision: 2021-10-14

Replaces version of: 2019-07-16

Version: (GHS 2)

## SECTION 1: Identification of the substance/mixture and of the company/ undertaking

#### **Product identifier** 1.1

Identification of the substance Hematoxylin solution A acc. to Weigert for mi-

croscopy

Article number X906

#### Relevant identified uses of the substance or mixture and uses advised against 1.2

Relevant identified uses: Laboratory chemical

Laboratory and analytical use

Uses advised against: Do not use for products which come into contact

with foodstuffs. Do not use for private purposes

(household).

#### 1.3 Details of the supplier of the safety data sheet

Carl Roth GmbH + Co KG Schoemperlenstr. 3-5 D-76185 Karlsruhe Germany

Telephone:+49 (0) 721 - 56 06 0 **Telefax:** +49 (0) 721 - 56 06 149 e-mail: sicherheit@carlroth.de Website: www.carlroth.de

Competent person responsible for the safety data :Department Health, Safety and Environment

sheet:

sicherheit@carlroth.de e-mail (competent person):

#### 1.4 **Emergency telephone number**

Name	Street	Postal code/city	Telephone	Website
NSW Poisons Information Centre Childrens Hospital	Hawkesbury Road	2145 West- mead, NSW	131126	

## **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

#### Classification acc. to GHS

Section	Hazard class	Cat- egory	Hazard class and category	Hazard statement
2.6	Flammable liquid	2	Flam. Liq. 2	H225
3.3	Serious eye damage/eye irritation	2	Eye Irrit. 2	H319
3.8D	Specific target organ toxicity - single exposure (narcotic effects, drowsiness)		STOT SE 3	H336

For full text of abbreviations: see SECTION 16

Australia (en) Page 1 / 16



acc. to Safe Work Australia - Code of Practice

# ROTH

#### Hematoxylin solution A acc. to Weigert for microscopy

article number: X906

## The most important adverse physicochemical, human health and environmental effects

The product is combustible and can be ignited by potential ignition sources.

#### 2.2 Label elements

#### Labelling

Signal word Danger

#### **Pictograms**

GHS02, GHS07



#### **Hazard statements**

H225 Highly flammable liquid and vapour
 H319 Causes serious eye irritation
 H336 May cause drowsiness or dizziness

#### **Precautionary statements**

## **Precautionary statements - prevention**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking

#### **Precautionary statements - response**

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing

P312 Call a POISON CENTER or doctor/physician if you feel unwell

P370+P378 In case of fire: Use sand, carbon dioxide or powder extinguisher for extinction

#### **Precautionary statements - storage**

P403+P233 Store in a well-ventilated place. Keep container tightly closed

P403+P235 Store in a well-ventilated place. Keep cool

#### **Precautionary statements - disposal**

P501 Dispose of contents/container to industrial combustion plant

Hazardous ingredients for labelling: 2-Propanol

#### 2.3 Other hazards

#### Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

## **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

not relevant (mixture)

#### 3.2 Mixtures

Australia (en) Page 2 / 16

acc. to Safe Work Australia - Code of Practice



#### Hematoxylin solution A acc. to Weigert for microscopy

article number: X906

#### **Description of the mixture**

Name of sub- stance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes
2-Propanol	CAS No 67-63-0	< 50	Flam. Liq. 2 / H225 Eye Irrit. 2 / H319 STOT SE 3 / H336		
Hematoxylin	CAS No 517-28-2	< 5	Eye Irrit. 2A / H319	<u>(!</u> )	

For full text of abbreviations: see SECTION 16

## **SECTION 4: First aid measures**

## 4.1 Description of first aid measures



#### **General notes**

Take off contaminated clothing.

#### Following inhalation

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

#### Following skin contact

Rinse skin with water/shower. In all cases of doubt, or when symptoms persist, seek medical advice.

#### Following eye contact

Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. In case of eye irritation consult an ophthalmologist.

#### Following ingestion

Rinse mouth. Call a doctor if you feel unwell.

#### 4.2 Most important symptoms and effects, both acute and delayed

Irritation, Vomiting, Dizziness, Drowsiness, Narcosis

## 4.3 Indication of any immediate medical attention and special treatment needed

none

# **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media



#### Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings water spray, alcohol resistant foam, dry extinguishing powder, BC-powder, carbon dioxide (CO<sub>2</sub>)

#### Unsuitable extinguishing media

Australia (en) Page 3 / 16

acc. to Safe Work Australia - Code of Practice

#### Hematoxylin solution A acc. to Weigert for microscopy

article number: X906

water jet

#### 5.2 Special hazards arising from the substance or mixture

Combustible. Vapours may form explosive mixtures with air. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures.

#### **Hazardous combustion products**

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>)

#### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

#### **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures



#### For non-emergency personnel

Do not breathe vapour/spray. Avoid contact with skin and eyes. Avoidance of ignition sources.

#### 6.2 Environmental precautions

Keep away from drains, surface and ground water. Danger of explosion.

## 6.3 Methods and material for containment and cleaning up

#### Advice on how to contain a spill

Covering of drains.

#### Advice on how to clean up a spill

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

#### Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

#### 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

# **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

Provision of sufficient ventilation.

#### Measures to prevent fire as well as aerosol and dust generation



Keep away from sources of ignition - No smoking.

Take precautionary measures against static discharge. Due to danger of explosion, prevent leakage

Australia (en) Page 4 / 16

acc. to Safe Work Australia - Code of Practice

#### Hematoxylin solution A acc. to Weigert for microscopy

article number: X906



of vapours into cellars, flues and ditches.

#### Advice on general occupational hygiene

Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs. When using do not smoke.

#### Conditions for safe storage, including any incompatibilities 7.2

Keep container tightly closed in a cool place.

#### **Incompatible substances or mixtures**

Observe hints for combined storage.

#### Consideration of other advice:

Not required.

## **Ventilation requirements**

Use local and general ventilation.

#### Specific designs for storage rooms or vessels

Recommended storage temperature: 15 – 25 °C

#### 7.3 Specific end use(s)

No information available.

# **SECTION 8: Exposure controls/personal protection**

#### 8.1 **Control parameters**

#### **National limit values**

#### **Occupational exposure limit values (Workplace Exposure Limits)**

Cou ntr y	Name of agent	CAS No	Identi- fier	TW A [pp m]	TWA [mg/ m³]	STE L [pp m]	STEL [mg/ m³]	Ceil ing- C [pp m]	Ceil- ing-C [mg/ m³]	Nota- tion	Source
AU	isopropyl alcohol (propan-2-ol)	67-63-0	WES	400	983	500	1,230				WES

#### Notation

Ceiling-C STEL

Ceiling value is a limit value above which exposure should not occur Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15minute period (unless otherwise specified)

TWA

Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

Relevant DNELs of components of the mixture						
Name of sub- stance	CAS No	End- point	Threshol d level	Protection goal, route of exposure	Used in	Exposure time
2-Propanol	67-63-0	DNEL	500 mg/m <sup>3</sup>	human, inhalat- ory	worker (industry)	chronic - systemic effects
2-Propanol	67-63-0	DNEL	888 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects

Australia (en) Page 5 / 16

acc. to Safe Work Australia - Code of Practice



article number: X906



#### Relevant PNECs of components of the mixture

Name of sub- stance	CAS No	End- point	Threshol d level	Organism	Environmental compartment	Exposure time
2-Propanol	67-63-0	PNEC	140.9 <sup>mg</sup> / <sub>l</sub>	aquatic organ- isms	freshwater	short-term (single instance)
2-Propanol	67-63-0	PNEC	140.9 <sup>mg</sup> / <sub>l</sub>	aquatic organ- isms	marine water	short-term (single instance)
2-Propanol	67-63-0	PNEC	2,251 <sup>mg</sup> / <sub>l</sub>	aquatic organ- isms	sewage treatment plant (STP)	short-term (single instance)
2-Propanol	67-63-0	PNEC	552 <sup>mg</sup> / <sub>kg</sub>	aquatic organ- isms	freshwater sedi- ment	short-term (single instance)
2-Propanol	67-63-0	PNEC	552 <sup>mg</sup> / <sub>kg</sub>	aquatic organ- isms	marine sediment	short-term (single instance)
2-Propanol	67-63-0	PNEC	28 <sup>mg</sup> / <sub>kg</sub>	terrestrial organ- isms	soil	short-term (single instance)

#### 8.2 Exposure controls

Individual protection measures (personal protective equipment)

#### **Eye/face protection**





Use safety goggle with side protection.

#### Skin protection





#### hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The times are approximate values from measurements at 22 ° C and permanent contact. Increased temperatures due to heated substances, body heat etc. and a reduction of the effective layer thickness by stretching can lead to a considerable reduction of the breakthrough time. If in doubt, contact manufacturer. At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved. The data apply only to the pure substance. When transferred to substance mixtures, they may only be considered as a quide.

type of material

NBR (Nitrile rubber)

material thickness

0,3 mm

• breakthrough times of the glove material

>480 minutes (permeation: level 6)

Australia (en) Page 6 / 16

acc. to Safe Work Australia - Code of Practice

#### Hematoxylin solution A acc. to Weigert for microscopy

article number: X906

#### other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

Flame-retardant protective clothing.

#### **Respiratory protection**





Respiratory protection necessary at: Aerosol or mist formation. Type: A (against organic gases and vapours with a boiling point of > 65 °C , colour code: Brown).

#### **Environmental exposure controls**

Keep away from drains, surface and ground water.

## **SECTION 9: Physical and chemical properties**

## 9.1 Information on basic physical and chemical properties

Physical state liquid

Colour red violet

Odour characteristic

Melting point/freezing point not determined

Boiling point or initial boiling point and boiling >85 °C at 1,013 hPa

range

Flammability flammable liquid in accordance with GHS criteria

Lower and upper explosion limit not determined

Flash point >12 °C
Auto-ignition temperature >425 °C

Auto-ignition temperature >425 °C Decomposition temperature not relevant pH (value)  $\sim 7 (20$  °C)

Kinematic viscosity not determined

Solubility(ies)

Water solubility miscible in any proportion

Partition coefficient

Partition coefficient n-octanol/water (log value): this information is not available

Vapour pressure not determined

Density  $\sim 0.9 \, \mathrm{g/_{cm^3}}$  at 20 °C

Relative vapour density information on this property is not available

Australia (en) Page 7 / 16

acc. to Safe Work Australia - Code of Practice



#### Hematoxylin solution A acc. to Weigert for microscopy

article number: X906

Particle characteristics not relevant (liquid)

Other safety parameters

Oxidising properties none

9.2 Other information

Information with regard to physical hazard

classes:

Flammable liquids

Sustained combustibility yes, sustained combustion was observed

Other safety characteristics:

Miscibility completely miscible with water

## **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

The mixture contains reactive substance(s). Risk of ignition. Vapours may form explosive mixtures with air.

#### If heated

Risk of ignition.

#### 10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

#### 10.3 Possibility of hazardous reactions

**Exothermic reaction with:** Aluminium, Aldehydes, Amines, Nitric acid, strong oxidiser, Perchlorates, Hydrogen peroxide,

=> Explosive properties

#### 10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

#### 10.5 Incompatible materials

plastic and rubber

#### 10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

# SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

Test data are not available for the complete mixture.

#### **Classification procedure**

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification acc. to GHS

Australia (en) Page 8 / 16

acc. to Safe Work Australia - Code of Practice

#### Hematoxylin solution A acc. to Weigert for microscopy

article number: X906

#### **Acute toxicity**

Shall not be classified as acutely toxic.

### Acute toxicity of components of the mixture

Name of substance	CAS No	Exposure route	Endpoint	Value	Species
2-Propanol	67-63-0	inhalation: va- pour	LC50	37.5 <sup>mg</sup> / <sub>l</sub> /4h	rat
2-Propanol	67-63-0	oral	LD50	5,045 <sup>mg</sup> / <sub>kg</sub>	rat
2-Propanol	67-63-0	dermal	LD50	12,800 <sup>mg</sup> / <sub>kg</sub>	rabbit
Hematoxylin	517-28-2	oral	LD50	≥2,000 <sup>mg</sup> / <sub>kg</sub>	rat

#### Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

#### Serious eye damage/eye irritation

Causes serious eye irritation.

#### Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

#### **Germ cell mutagenicity**

Shall not be classified as germ cell mutagenic.

#### Carcinogenicity

Shall not be classified as carcinogenic.

#### Reproductive toxicity

Shall not be classified as a reproductive toxicant.

#### Specific target organ toxicity - single exposure

May cause drowsiness or dizziness.

## Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

#### **Aspiration hazard**

Shall not be classified as presenting an aspiration hazard.

#### Symptoms related to the physical, chemical and toxicological characteristics

• If swallowed

vomiting

• If in eyes

Causes serious eye irritation

• If inhaled

dizziness, fatigue, narcosis

• If on skin

Data are not available.

Other information

none

Australia (en) Page 9 / 16

acc. to Safe Work Australia - Code of Practice



#### Hematoxylin solution A acc. to Weigert for microscopy

article number: X906

#### 11.2 Endocrine disrupting properties

None of the ingredients are listed.

# **SECTION 12: Ecological information**

#### 12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute) of components of the mixture					
Name of sub- stance	CAS No	Endpoint	Value	Species	Exposure time
2-Propanol	67-63-0	LC50	9,640 <sup>mg</sup> / <sub>l</sub>	Pimephales promelas	96 h
Hematoxylin	517-28-2	LC50	>35 <sup>mg</sup> / <sub>l</sub>	fish	96 h
Hematoxylin	517-28-2	EC50	29.7 <sup>mg</sup> / <sub>l</sub>	aquatic invertebrates	48 h

# Aquatic toxicity (chronic) of components of the mixture Name of substance CAS No stance Endpoint stance Value stance Species stance Exposure time 2-Propanol 67-63-0 LC50 >10,000 mg/<sub>I</sub> aquatic invertebrates 24 h

## **Biodegradation**

Data are not available.

## 12.2 Process of degradability

Degradabilit	Degradability of components of the mixture					
Name of substance	CAS No	Process	Degrada- tion rate	Time	Method	Source
2-Propanol	67-63-0	biotic/abiotic	95 %	21 d	modifizierter OECD Screen- ing Test	
2-Propanol	67-63-0	oxygen deple- tion	53 %	5 d		ECHA
Hematoxylin	517-28-2	DOC removal	≥10 – ≤20 %	28 d		ECHA

## 12.3 Bioaccumulative potential

Data are not available.

Bioaccumulative potential of components of the mixture					
Name of substance	CAS No	BCF	Log KOW	BOD5/COD	
2-Propanol	67-63-0		0.05		
Hematoxylin	517-28-2		≤0.3 (pH value: ~6.9, 30 °C)		

#### 12.4 Mobility in soil

Data are not available.

Australia (en) Page 10 / 16

acc. to Safe Work Australia - Code of Practice

#### Hematoxylin solution A acc. to Weigert for microscopy

article number: X906

#### 12.5 Results of PBT and vPvB assessment

Data are not available.

#### 12.6 Endocrine disrupting properties

None of the ingredients are listed.

#### 12.7 Other adverse effects

Data are not available.

# **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods



This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Sewage disposal-relevant information

Do not empty into drains.

#### Waste treatment of containers/packagings

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

#### Relevant provisions relating to waste(Basel Convention)

#### Properties of waste which render it hazardous

**H3** Flammable liquids

#### 13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.

# **SECTION 14: Transport information**

#### 14.1 UN number

UN RTDG UN 1219
IMDG-Code UN 1219
ICAO-TI UN 1219

#### 14.2 UN proper shipping name

UN RTDG ISOPROPANOL IMDG-Code ISOPROPANOL ICAO-TI Isopropanol

#### 14.3 Transport hazard class(es)

UN RTDG 3
IMDG-Code 3
ICAO-TI 3

## 14.4 Packing group

Australia (en) Page 11 / 16

acc. to Safe Work Australia - Code of Practice



#### Hematoxylin solution A acc. to Weigert for microscopy

article number: X906

UN RTDG II
IMDG-Code II
ICAO-TI II

**14.5 Environmental hazards** non-environmentally hazardous acc. to the dan-

gerous goods regulations

14.6 Special precautions for user

There is no additional information.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

The cargo is not intended to be carried in bulk.

14.8 Information for each of the UN Model Regulations

Transport informationNational regulationsAdditional information(UN RTDG)

UN number 1219
Class 3
Packing group II
Danger label(s) 3



Special provisions (SP)

**UN RTDG** 

Excepted quantities (EQ)

UN RTDG

Limited quantities (LQ)

UN RTDG

International Maritime Dangerous Goods Code (IMDG) - Additional information

Proper shipping name ISOPROPANOL

Particulars in the shipper's declaration UN1219, ISOPROPANOL, 3, II, >12°C c.c.

Marine pollutant Danger label(s) 3



Special provisions (SP)

Excepted quantities (EQ) E2
Limited quantities (LQ) 1 L

EmS F-E, S-D

Stowage category B

Australia (en) Page 12 / 16

acc. to Safe Work Australia - Code of Practice



#### Hematoxylin solution A acc. to Weigert for microscopy

article number: X906

## International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Proper shipping name Isopropanol

Particulars in the shipper's declaration UN1219, Isopropanol, 3, II

Danger label(s) 3



Special provisions (SP) A180

E2 Excepted quantities (EQ)

Limited quantities (LQ) 1 L

## **SECTION 15: Regulatory information**

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture There is no additional information.

National regulations(Australia)

Australian Inventory of Chemical Substances(AICS)

All ingredients are listed or exempt from listing.

#### Other information

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

#### **National inventories**

Country	Inventory	Status
AU	AICS	all ingredients are listed
CA	DSL	all ingredients are listed
CN	IECSC	all ingredients are listed
EU	ECSI	all ingredients are listed
EU	REACH Reg.	all ingredients are listed
JP	CSCL-ENCS	all ingredients are listed
JP	ISHA-ENCS	not all ingredients are listed
KR	KECI	all ingredients are listed
MX	INSQ	not all ingredients are listed
NZ	NZIoC	all ingredients are listed
PH	PICCS	all ingredients are listed
TR	CICR	not all ingredients are listed
TW	TCSI	all ingredients are listed
US	TSCA	all ingredients are listed

Legend

Australian Inventory of Chemical Substances Chemical Inventory and Control Regulation List of Existing and New Chemical Substances (CSCL-ENCS)

CSCL-ENCS DSL

Domestic Substances List (DSL)

Australia (en) Page 13 / 16

acc. to Safe Work Australia - Code of Practice



#### Hematoxylin solution A acc. to Weigert for microscopy

article number: X906

Legend

ECSI IECSC

EC Substance Inventory (EINECS, ELINCS, NLP)
Inventory of Existing Chemical Substances Produced or Imported in China
National Inventory of Chemical Substances

INSQ

ISHA-ENCS KECI Inventory of Existing and New Chemical Substances (ISHA-ENCS)

NECTION OF Existing and New Cheffillal Substances (ISHA-ENCS)
KECI Korea Existing Chemicals Inventory
NZIOC New Zealand Inventory of Chemicals
PICCS Philippine Inventory of Chemicals and Chemical Substances (PICCS)
REACH Reg. REACH registered substances

Taiwan Chemical Substance Inventory

**TSCA Toxic Substance Control Act** 

#### 15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

## **SECTION 16: Other information**

#### Indication of changes (revised safety data sheet)

Alignment to regulation: Globally Harmonized System of Classification and Labelling of Chemicals ("Purple book").

Restructuring: section 9, section 14

Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
2.1		Classification acc. to GHS: change in the listing (table)	yes
2.1	The most important adverse physicochemical, human health and environmental effects: Narcotic effects.	The most important adverse physicochemical, human health and environmental effects: The product is combustible and can be ignited by potential ignition sources.	yes
2.2	Labelling of packages where the contents do not exceed 125 ml: Signal word: Danger		yes
2.2		Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)	yes
2.2		Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)	yes
2.2	contains: 2-Propanol		yes
2.3	Other hazards: There is no additional information.	Other hazards	yes
2.3		Results of PBT and vPvB assessment: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.	yes

## Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations				
BCF	Bioconcentration factor				
BOD	Biochemical Oxygen Demand				
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)				
Ceiling-C	Ceiling value				
COD	Chemical oxygen demand				

Australia (en) Page 14 / 16

acc. to Safe Work Australia - Code of Practice



## Hematoxylin solution A acc. to Weigert for microscopy

article number: X906

Abbr.	Descriptions of used abbreviations
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
Flam. Liq.	Flammable liquid
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code
IMDG-Code	International Maritime Dangerous Goods Code
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
log KOW	n-Octanol/water
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
STEL	Short-term exposure limit
STOT SE	Specific target organ toxicity - single exposure
TWA	Time-weighted average
UN RTDG	UN Recommendations on the Transport of Dangerous Good
vPvB	Very Persistent and very Bioaccumulative
WES	Safe Work Australia: Workplace exposure standards for airborne contaminants

## Key literature references and sources for data

Safe Work Australia's Code of Practice for Labelling of Workplace Hazardous Chemicals (under WHS Regulations).

Australia (en) Page 15 / 16

acc. to Safe Work Australia - Code of Practice



#### Hematoxylin solution A acc. to Weigert for microscopy

article number: X906

UN Recommendations on the Transport of Dangerous Good. International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

#### **Classification procedure**

Physical and chemical properties. The classification is based on tested mixture. Health hazards. Environmental hazards. The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

## List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

#### **Disclaimer**

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

Australia (en) Page 16 / 16

acc. to Safe Work Australia - Code of Practice

#### Hematoxylin solution B acc. to Weigert for microscopy

article number: X907 date of compilation: 2016-12-08 Version: GHS 3.0 en

Replaces version of: 2019-07-16

Version: (GHS 2)

## SECTION 1: Identification of the substance/mixture and of the company/ undertaking

#### **Product identifier** 1.1

Identification of the substance Hematoxylin solution B acc. to Weigert for mi-

croscopy

Article number X907

#### Relevant identified uses of the substance or mixture and uses advised against 1.2

Relevant identified uses: Laboratory chemical

Laboratory and analytical use

Uses advised against: Do not use for products which come into contact

with foodstuffs. Do not use for private purposes

(household).

#### 1.3 Details of the supplier of the safety data sheet

Carl Roth GmbH + Co KG Schoemperlenstr. 3-5 D-76185 Karlsruhe Germany

Telephone:+49 (0) 721 - 56 06 0 **Telefax:** +49 (0) 721 - 56 06 149 e-mail: sicherheit@carlroth.de Website: www.carlroth.de

Competent person responsible for the safety data :Department Health, Safety and Environment

sheet:

sicherheit@carlroth.de e-mail (competent person):

#### 1.4 **Emergency telephone number**

Name	Street	Postal code/city	Telephone	Website
NSW Poisons Information Centre Childrens Hospital	Hawkesbury Road	2145 West- mead, NSW	131126	

## **SECTION 2: Hazards identification**

#### Classification of the substance or mixture 2.1

#### Classification acc. to GHS

Section	Hazard class	Cat- egory	Hazard class and category	Hazard statement
2.16	Substance or mixture corrosive to metals	1	Met. Corr. 1	H290
3.2	Skin corrosion/irritation	2	Skin Irrit. 2	H315
3.3	Serious eye damage/eye irritation	1	Eye Dam. 1	H318

For full text of abbreviations: see SECTION 16

#### 2.2 **Label elements**

Page 1 / 15 Australia (en)



Revision: 2021-10-14

acc. to Safe Work Australia - Code of Practice



#### Hematoxylin solution B acc. to Weigert for microscopy

article number: X907

#### Labelling

Signal word Danger

#### **Pictograms**

GHS05



#### **Hazard statements**

H290 May be corrosive to metals
 H315 Causes skin irritation
 H318 Causes serious eye damage

#### **Precautionary statements**

#### **Precautionary statements - prevention**

P234 Keep only in original container P280 Wear protective gloves

#### **Precautionary statements - response**

P302+P352 IF ON SKIN: Wash with plenty of soap and water

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing

P310 Immediately call a POISON CENTER or doctor/physician

P321 Specific treatment (see on this label)

P362+P364 Take off contaminated clothing and wash it before reuse

P390 Absorb spillage to prevent material damage

Hazardous ingredients for labelling: Iron(III) chloride hexahydrate, Hydrochloric acid

.... %

#### 2.3 Other hazards

#### Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

## **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

not relevant (mixture)

#### 3.2 Mixtures

#### **Description of the mixture**

Name of sub- stance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes
Iron(III) chloride hexahydrate	CAS No 10025-77-1	< 5	Met. Corr. 1 / H290 Acute Tox. 4 / H302 Skin Irrit. 2 / H315 Eye Dam. 1 / H318		
Hydrochloric acid %	CAS No 7647-01-0	< 2.5	Met. Corr. 1 / H290 Skin Corr. 1 / H314 Eye Dam. 1 / H318 STOT SE 3 / H335		B(a)

Australia (en) Page 2 / 15

acc. to Safe Work Australia - Code of Practice



#### Hematoxylin solution B acc. to Weigert for microscopy

article number: X907

**Notes** 

B(a): The classification refers to an aqueous solution

For full text of abbreviations: see SECTION 16

## **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures



#### **General notes**

Take off contaminated clothing.

#### Following inhalation

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

#### Following skin contact

Rinse skin with water/shower. In case of skin irritation, consult a physician.

#### Following eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

#### Following ingestion

Rinse mouth. Call a doctor if you feel unwell.

## 4.2 Most important symptoms and effects, both acute and delayed

Irritant effects, Risk of serious damage to eyes, Irritation

#### 4.3 Indication of any immediate medical attention and special treatment needed

none

# **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media



#### Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings water spray, alcohol resistant foam, dry extinguishing powder, BC-powder, carbon dioxide (CO<sub>2</sub>)

## Unsuitable extinguishing media

water jet

#### 5.2 Special hazards arising from the substance or mixture

Non-combustible.

#### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

Australia (en) Page 3 / 15

acc. to Safe Work Australia - Code of Practice

#### Hematoxylin solution B acc. to Weigert for microscopy

article number: X907



## **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures



#### For non-emergency personnel

Do not breathe vapour/spray. Avoid contact with skin and eyes.

## 6.2 Environmental precautions

Keep away from drains, surface and ground water. The product is an acid. Before discharge into sewage plants the product normally needs to be neutralised.

#### 6.3 Methods and material for containment and cleaning up

#### Advice on how to contain a spill

Covering of drains.

#### Advice on how to clean up a spill

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

#### Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

#### 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

## **SECTION 7: Handling and storage**

## 7.1 Precautions for safe handling

Handle and open container with care.

#### Advice on general occupational hygiene

Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs.

#### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a cool place.

#### **Incompatible substances or mixtures**

Observe hints for combined storage.

#### Consideration of other advice:

#### Specific designs for storage rooms or vessels

Recommended storage temperature: 15 - 25 °C

#### 7.3 Specific end use(s)

No information available.

Australia (en) Page 4 / 15

acc. to Safe Work Australia - Code of Practice



article number: X907



## SECTION 8: Exposure controls/personal protection

#### 8.1 **Control parameters**

#### **National limit values**

#### Occupational exposure limit values (Workplace Exposure Limits)

Cou ntr y	Name of agent	CAS No	Identi- fier	TW A [pp m]	TWA [mg/ m³]	STE L [pp m]	STEL [mg/ m³]	Ceil ing- C [pp m]	Ceil- ing-C [mg/ m³]	Nota- tion	Source	
AU	hydrogen chloride (hydrochloric acid)	7647-01- 0	WES					5	7.5		WES	

#### **Notation**

Ceiling-C

Ceiling value is a limit value above which exposure should not occur

Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified) **TWA** 

## Relevant DNELs of components of the mixture

Name of sub- stance	CAS No	End- point	Threshol d level	Protection goal, route of exposure	Used in	Exposure time
Iron(III) chloride hexahydrate	10025-77-1	DNEL	2.8 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Hydrochloric acid %	7647-01-0	DNEL	8 mg/m³	human, inhalat- ory	worker (industry)	chronic - local ef- fects
Hydrochloric acid %	7647-01-0	DNEL	15 mg/m³	human, inhalat- ory	worker (industry)	acute - local ef- fects

#### 8.2 **Exposure controls**

#### Individual protection measures (personal protective equipment)

#### **Eye/face protection**





Use safety goggle with side protection.

#### Skin protection





#### hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The times are approximate values from measurements at 22 ° C and permanent contact. Increased temperatures due to heated substances, body heat etc. and a reduction of the effective layer thickness by stretching can lead to a considerable reduction of the breakthrough time. If in doubt, contact manufacturer. At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved. The data apply

Page 5 / 15 Australia (en)

acc. to Safe Work Australia - Code of Practice

#### Hematoxylin solution B acc. to Weigert for microscopy

article number: X907

only to the pure substance. When transferred to substance mixtures, they may only be considered as a guide.

#### type of material

NBR (Nitrile rubber)

#### material thickness

>0,11 mm

#### breakthrough times of the glove material

>480 minutes (permeation: level 6)

#### other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

#### **Respiratory protection**





Respiratory protection necessary at: Aerosol or mist formation. Type: E (against acidic gases like sulphur dioxide or hydrogen chloride, colour code: Yellow).

#### **Environmental exposure controls**

Keep away from drains, surface and ground water.

## SECTION 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

Physical state liquid Colour

yellowish brown Odour characteristic not determined Melting point/freezing point

~ 100 °C Boiling point or initial boiling point and boiling

range

**Flammability** non-combustible

Lower and upper explosion limit not determined Flash point not determined Auto-ignition temperature not determined

Decomposition temperature not relevant pH (value) <2 (20 °C)

Kinematic viscosity not determined

Solubility(ies)

Water solubility miscible in any proportion

Partition coefficient

Australia (en) Page 6 / 15

acc. to Safe Work Australia - Code of Practice



#### Hematoxylin solution B acc. to Weigert for microscopy

article number: X907

Partition coefficient n-octanol/water (log value): not relevant (inorganic)

Vapour pressure not determined

Density  $\sim 1.03 \, {\rm g/_{cm^3}}$  at 20 °C

Relative vapour density information on this property is not available

Particle characteristics not relevant (liquid)

Other safety parameters

Oxidising properties none

9.2 Other information

Information with regard to physical hazard

classes:

Corrosive to metals category 1: corrosive to metals

Other safety characteristics:

Miscibility completely miscible with water

# **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

Substance or mixture corrosive to metals.

#### 10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

#### 10.3 Possibility of hazardous reactions

Violent reaction with: Alkali (lye), Strong alkali

#### 10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

## 10.5 Incompatible materials

different metals

#### 10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

Australia (en) Page 7 / 15

acc. to Safe Work Australia - Code of Practice

#### Hematoxylin solution B acc. to Weigert for microscopy

article number: X907



## **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

Test data are not available for the complete mixture.

#### **Classification procedure**

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### Classification acc. to GHS

#### **Acute toxicity**

Shall not be classified as acutely toxic.

# Acute toxicity estimate (ATE) of components of the mixture

Name of substance	CAS No	Exposure route	ATE
Iron(III) chloride hexahydrate	10025-77-1	oral	500 <sup>mg</sup> / <sub>kg</sub>

#### Acute toxicity of components of the mixture

Name of substance	CAS No	Exposure route	Endpoint	Value	Species
Iron(III) chloride hexahydrate	10025-77-1	oral	LD50	500 <sup>mg</sup> / <sub>kg</sub>	rat
Iron(III) chloride hexahydrate	10025-77-1	dermal	LD50	>2,000 <sup>mg</sup> / <sub>kg</sub>	rat

#### Skin corrosion/irritation

Causes skin irritation.

#### Serious eye damage/eye irritation

Causes serious eye damage.

#### Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

#### Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

#### Carcinogenicity

Shall not be classified as carcinogenic.

#### Reproductive toxicity

Shall not be classified as a reproductive toxicant.

#### Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

#### **Specific target organ toxicity - repeated exposure**

Shall not be classified as a specific target organ toxicant (repeated exposure).

## **Aspiration hazard**

Shall not be classified as presenting an aspiration hazard.

#### Symptoms related to the physical, chemical and toxicological characteristics

Australia (en) Page 8 / 15

acc. to Safe Work Australia - Code of Practice



#### Hematoxylin solution B acc. to Weigert for microscopy

article number: X907

#### If swallowed

irritant effects

#### • If in eyes

Causes serious eye damage, risk of blindness

#### If inhaled

Data are not available.

#### • If on skin

causes skin irritation

#### Other information

none

#### 11.2 Endocrine disrupting properties

None of the ingredients are listed.

## **SECTION 12: Ecological information**

#### 12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

#### **Biodegradation**

Not readily biodegradable. The methods for determining the biological degradability are not applicable to inorganic substances.

#### 12.2 Process of degradability

Data are not available.

## 12.3 Bioaccumulative potential

Data are not available.

## 12.4 Mobility in soil

Data are not available.

#### 12.5 Results of PBT and vPvB assessment

Data are not available.

#### 12.6 Endocrine disrupting properties

None of the ingredients are listed.

#### 12.7 Other adverse effects

Data are not available.

# SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods



This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Sewage disposal-relevant information

Australia (en) Page 9 / 15

acc. to Safe Work Australia - Code of Practice

# ©

#### Hematoxylin solution B acc. to Weigert for microscopy

article number: X907

Do not empty into drains.

## Waste treatment of containers/packagings

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

#### **Relevant provisions relating to waste(Basel Convention)**

#### Properties of waste which render it hazardous

**H8** Corrosives

#### 13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.

# **SECTION 14: Transport information**

#### 14.1 UN number

UN RTDG UN

3264

IMDG-Code UN 3264

ICAO-TI UN 3264

14.2 UN proper shipping name

**UN RTDG** CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.

IMDG-Code CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.

ICAO-TI Corrosive liquid, acidic, inorganic, n.o.s.

Technical name (hazardous ingredients)

Iron(III) chloride hexahydrate, Hydrochloric acid

.... %

14.3 Transport hazard class(es)

UN RTDG 8
IMDG-Code 8

ICAO-TI 8

14.4 Packing group

UN RTDG III
IMDG-Code III
ICAO-TI III

**14.5 Environmental hazards** non-environmentally hazardous acc. to the dan-

gerous goods regulations

14.6 Special precautions for user

There is no additional information.

#### 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

The cargo is not intended to be carried in bulk.

## 14.8 Information for each of the UN Model Regulations

Australia (en) Page 10 / 15

acc. to Safe Work Australia - Code of Practice



#### Hematoxylin solution B acc. to Weigert for microscopy

article number: X907

Transport informationNational regulationsAdditional information(UN RTDG)

**UN number** 3264 Class 8 **Packing group** III 8 Danger label(s)

Special provisions (SP) 223, 274 UN RTDG

**Excepted quantities (EQ)** 

**UN RTDG** 

Limited quantities (LQ)

**UN RTDG** 

International Maritime Dangerous Goods Code (IMDG) - Additional information

CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. Proper shipping name

UN3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., (contains: Iron(III) chloride hexahy-Particulars in the shipper's declaration

drate, Hydrochloric acid .... %), 8, III

Marine pollutant

8 Danger label(s)

Special provisions (SP) 223, 274

Excepted quantities (EQ) E1 Limited quantities (LQ) 5 L

**EmS** F-A, S-B

Stowage category Α

Segregation group 1 - Acids

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Proper shipping name Corrosive liquid, acidic, inorganic, n.o.s.

Particulars in the shipper's declaration UN3264, Corrosive liquid, acidic, inorganic, n.o.s.,

(contains: Iron(III) chloride hexahydrate, Hydro-

chloric acid .... %), 8, III

8 Danger label(s)



Special provisions (SP) **A3** Excepted quantities (EQ) F1 Limited quantities (LQ) 1 L

Australia (en) Page 11 / 15

acc. to Safe Work Australia - Code of Practice



article number: X907



## **SECTION 15: Regulatory information**

## Safety, health and environmental regulations/legislation specific for the substance or mixture

There is no additional information.

#### National regulations(Australia)

#### Australian Inventory of Chemical Substances(AICS)

All ingredients are listed or exempt from listing.

#### Other information

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

#### UN Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances

Name of substance	CAS No	Listed in	HS code
Hydrochloric acid %	7647-01-0	Table II	2806.10

#### **National inventories**

Country	Inventory	Status			
AU	AICS	all ingredients are listed			
CA	DSL	not all ingredients are listed			
CN	IECSC	all ingredients are listed			
EU	ECSI	not all ingredients are listed			
EU	REACH Reg.	all ingredients are listed			
JP	CSCL-ENCS	not all ingredients are listed			
KR	KECI	not all ingredients are listed			
MX	INSQ	not all ingredients are listed			
NZ	NZIoC	all ingredients are listed			
PH	PICCS	all ingredients are listed			
TR	CICR	not all ingredients are listed			
TW	TCSI	all ingredients are listed			
US	TSCA	not all ingredients are listed			

#### Legend

Australian Inventory of Chemical Substances Chemical Inventory and Control Regulation List of Existing and New Chemical Substances (CSCL-ENCS) CSCL-ENCS

DSL ECSI

Domestic Substances List (DSL)
EC Substance Inventory (EINECS, ELINCS, NLP)
Inventory of Existing Chemical Substances Produced or Imported in China National Inventory of Chemical Substances

NATION INVESTIGATION OF CHEMICAL SUBSTANCES

KECI Korea Existing Chemicals Inventory

NZIOC New Zealand Inventory of Chemicals

PICCS Philippine Inventory of Chemicals and Chemical Substances (PICCS)

REACH Reg. REACH registered substances

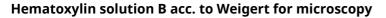
Taiwan Chemical Substance Inventory TCSI TSCA Toxic Substance Control Act

#### **Chemical Safety Assessment**

Chemical safety assessments for substances in this mixture were not carried out.

Australia (en) Page 12 / 15

acc. to Safe Work Australia - Code of Practice



article number: X907



## **SECTION 16: Other information**

## Indication of changes (revised safety data sheet)

Alignment to regulation: Globally Harmonized System of Classification and Labelling of Chemicals

("Purple book").

Restructuring: section 9, section 14

Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
2.1		Classification acc. to GHS: change in the listing (table)	yes
2.2		Pictograms: change in the listing (table)	yes
2.2		Hazard statements: change in the listing (table)	yes
2.2		Precautionary statements - prevention: change in the listing (table)	yes
2.2		Precautionary statements - response: change in the listing (table)	yes
2.2	Precautionary statements - disposal		yes
2.2		Precautionary statements - disposal: change in the listing (table)	yes
2.2	Labelling of packages where the contents do not exceed 125 ml: Signal word: Danger		yes
2.2		Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)	yes
2.2		Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)	yes
2.2		Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)	yes
2.2	contains: Iron(III) chloride hexahydrate		yes
2.2	Hazardous ingredients for labelling: Iron(III) chloride hexahydrate	Hazardous ingredients for labelling: Iron(III) chloride hexahydrate, Hydrochloric acid %	yes
2.3	Other hazards: There is no additional information.	Other hazards	yes
2.3		Results of PBT and vPvB assessment: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.	yes

**Abbreviations and acronyms** 

Australia (en) Page 13 / 15

acc. to Safe Work Australia - Code of Practice



# Hematoxylin solution B acc. to Weigert for microscopy

article number: **X907** 

Abbr.	Descriptions of used abbreviations		
Acute Tox.	Acute toxicity		
ATE	Acute Toxicity Estimate		
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)		
Ceiling-C	Ceiling value		
DGR	Dangerous Goods Regulations (see IATA/DGR)		
DNEL	Derived No-Effect Level		
EINECS	European Inventory of Existing Commercial Chemical Substances		
ELINCS	European List of Notified Chemical Substances		
EmS	Emergency Schedule		
Eye Dam.	Seriously damaging to the eye		
Eye Irrit.	Irritant to the eye		
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations		
HS	Harmonized Commodity Description and Coding System (Harmonized System, drawn up by the World Customs Organisation)		
IATA	International Air Transport Association		
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)		
ICAO	International Civil Aviation Organization		
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air		
IMDG	International Maritime Dangerous Goods Code		
IMDG-Code	International Maritime Dangerous Goods Code		
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during specified time interval		
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")		
Met. Corr.	Substance or mixture corrosive to metals		
NLP	No-Longer Polymer		
PBT	Persistent, Bioaccumulative and Toxic		
ppm	Parts per million		
Skin Corr.	Corrosive to skin		
Skin Irrit.	Irritant to skin		
STEL	Short-term exposure limit		
STOT SE	Specific target organ toxicity - single exposure		
TWA	Time-weighted average		
UN RTDG	UN Recommendations on the Transport of Dangerous Good		
vPvB	Very Persistent and very Bioaccumulative		
WES	Safe Work Australia: Workplace exposure standards for airborne contaminants		

Australia (en) Page 14 / 15

acc. to Safe Work Australia - Code of Practice



#### Hematoxylin solution B acc. to Weigert for microscopy

article number: X907

#### Key literature references and sources for data

Safe Work Australia's Code of Practice for Labelling of Workplace Hazardous Chemicals (under WHS Regulations).

UN Recommendations on the Transport of Dangerous Good. International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

#### **Classification procedure**

Physical and chemical properties. The classification is based on tested mixture. Health hazards. Environmental hazards. The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

### List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text			
H290	May be corrosive to metals.			
H302	Harmful if swallowed.			
H314	Causes severe skin burns and eye damage.			
H315	Causes skin irritation.			
H318	Causes serious eye damage.			
H335	May cause respiratory irritation.			

#### **Disclaimer**

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

Australia (en) Page 15 / 15

acc. to Safe Work Australia - Code of Practice

#### Van Gieson's Solution for microscopy

article number: 3925 Version: GHS 2.0 en Revision: 2021-10-15

Replaces version of: 2019-07-18

Version: (GHS 1)

## SECTION 1: Identification of the substance/mixture and of the company/ undertaking

#### **Product identifier** 1.1

Identification of the substance Van Gieson's Solution for microscopy

Article number 3925

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: Laboratory chemical

Laboratory and analytical use

Uses advised against: Do not use for products which come into contact

with foodstuffs. Do not use for private purposes

(household).

#### 1.3 Details of the supplier of the safety data sheet

Carl Roth GmbH + Co KG Schoemperlenstr. 3-5 D-76185 Karlsruhe Germany

**Telephone:**+49 (0) 721 - 56 06 0 Telefax: +49 (0) 721 - 56 06 149 **e-mail:** sicherheit@carlroth.de Website: www.carlroth.de

Competent person responsible for the safety data :Department Health, Safety and Environment

sheet:

e-mail (competent person):

sicherheit@carlroth.de

#### 1.4 **Emergency telephone number**

Name	Street	Postal code/city	Telephone	Website
NSW Poisons Information Centre Childrens Hospital	Hawkesbury Road	2145 West- mead, NSW	131126	

## **SECTION 2: Hazards identification**

#### Classification of the substance or mixture 2.1

#### Classification acc. to GHS

This mixture does not meet the criteria for classification.

#### 2.2 **Label elements**

## Labelling

not required

Australia (en) Page 1 / 12



date of compilation: 2019-07-18

acc. to Safe Work Australia - Code of Practice

#### Van Gieson's Solution for microscopy

article number: 3925

# **SECTION 3: Composition/information on ingredients**

#### **Substances**

not relevant (mixture)

#### 3.2 **Mixtures**

#### **Description of the mixture**

Name of sub- stance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes
Picric acid	CAS No 88-89-1	1-<5	Expl. 1.1 / H201 Acute Tox. 3 / H301 Acute Tox. 3 / H311 Acute Tox. 3 / H331		
Acid fuchsin	CAS No 3244-88-0	< 0.5	Skin Corr. 1C / H314 Eye Dam. 1 / H318		

For full text of abbreviations: see SECTION 16

## **SECTION 4: First aid measures**

#### 4.1 **Description of first aid measures**



#### **General notes**

Take off contaminated clothing.

#### Following inhalation

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

#### Following skin contact

Rinse skin with water/shower. In all cases of doubt, or when symptoms persist, seek medical advice.

## Following eye contact

Rinse cautiously with water for several minutes. In all cases of doubt, or when symptoms persist, seek medical advice.

#### Following ingestion

Rinse mouth. Call a doctor if you feel unwell.

#### 4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

#### 4.3 Indication of any immediate medical attention and special treatment needed

none

Australia (en) Page 2 / 12



#### 2.3 Other hazards

#### Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

acc. to Safe Work Australia - Code of Practice

#### Van Gieson's Solution for microscopy

article number: 3925



# **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media



#### Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings water spray, alcohol resistant foam, dry extinguishing powder, BC-powder, carbon dioxide (CO<sub>2</sub>)

#### Unsuitable extinguishing media

water jet

## 5.2 Special hazards arising from the substance or mixture

Non-combustible.

#### **Hazardous combustion products**

In case of fire may be liberated: Nitrogen oxides (NOx)

#### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

#### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures



#### For non-emergency personnel

No special measures are necessary.

#### **6.2** Environmental precautions

Keep away from drains, surface and ground water.

#### 6.3 Methods and material for containment and cleaning up

#### Advice on how to contain a spill

Covering of drains.

#### Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece).

## Other information relating to spills and releases

Place in appropriate containers for disposal.

#### 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

Australia (en) Page 3 / 12

acc. to Safe Work Australia - Code of Practice

#### Van Gieson's Solution for microscopy

article number: 3925



# **SECTION 7: Handling and storage**

#### Precautions for safe handling 7.1

When not in use, keep containers tightly closed.

#### Advice on general occupational hygiene

Keep away from food, drink and animal feedingstuffs.

#### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a cool place.

#### **Incompatible substances or mixtures**

Observe hints for combined storage.

Consideration of other advice:

#### Specific designs for storage rooms or vessels

Recommended storage temperature: 15 - 25 °C

#### 7.3 Specific end use(s)

No information available.

# SECTION 8: Exposure controls/personal protection

#### 8.1 **Control parameters**

#### **National limit values**

#### **Occupational exposure limit values (Workplace Exposure Limits)**

Cou ntr y	Name of agent	CAS No	Identi- fier	TW A [pp m]	TWA [mg/ m³]	STE L [pp m]	STEL [mg/ m³]	Ceil ing- C [pp m]	Ceil- ing-C [mg/ m³]	Nota- tion	Source
AU	picric acid (2,4,6- trinitrophenol)	88-89-1	WES		0.1						WES

#### Notation

Ceiling-C STEL

Ceiling value is a limit value above which exposure should not occur Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

**TWA** Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

#### 8.2 **Exposure controls**

#### Individual protection measures (personal protective equipment)

#### **Eye/face protection**





Use safety goggle with side protection.

#### Skin protection



Australia (en) Page 4 / 12

acc. to Safe Work Australia - Code of Practice

#### Van Gieson's Solution for microscopy

article number: 3925



Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374.

#### type of material

NBR (Nitrile rubber)

#### material thickness

>0.11 mm

#### • breakthrough times of the glove material

>480 minutes (permeation: level 6)

#### other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

#### **Respiratory protection**





Respiratory protection necessary at: Aerosol or mist formation. Type: A (against organic gases and vapours with a boiling point of > 65 °C , colour code: Brown).

#### **Environmental exposure controls**

Keep away from drains, surface and ground water.

# **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

Physical state liquid
Colour red

Odour odourless Melting point/freezing point  $\sim 0 \, ^{\circ}\text{C}$  Boiling point or initial boiling point and boiling  $\sim 100 \, ^{\circ}\text{C}$ 

range

Flammability non-combustible
Lower and upper explosion limit not determined
Flash point not determined
Auto-ignition temperature not determined
Decomposition temperature not relevant
pH (value) 5 - 7 (20 °C)

Kinematic viscosity not determined

Solubility(ies)

Water solubility miscible in any proportion

Partition coefficient

Australia (en) Page 5 / 12



#### \_\_\_\_\_

acc. to Safe Work Australia - Code of Practice

#### Van Gieson's Solution for microscopy

article number: 3925

Partition coefficient n-octanol/water (log value): not relevant (inorganic)

not determined Vapour pressure

Density  $\sim 1 \, {\rm {}^{9}/_{cm^{3}}}$  at 20 °C

Relative vapour density information on this property is not available

Particle characteristics not relevant (liquid)

Other safety parameters

Oxidising properties none

9.2 Other information

Information with regard to physical hazard

(physical hazards): not relevant

Other safety characteristics:

Miscibility completely miscible with water

# **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

This material is not reactive under normal ambient conditions.

#### 10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

hazard classes acc. to GHS

#### 10.3 Possibility of hazardous reactions

Violent reaction with: strong oxidiser, Aluminium, Ammonia (NH3), Bases, Metals, Reducing agents

#### 10.4 Conditions to avoid

Do not dry up the product.

#### 10.5 Incompatible materials

There is no additional information.

#### 10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

# SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

Test data are not available for the complete mixture.

#### Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### Classification acc. to GHS

This mixture does not meet the criteria for classification.

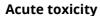
Page 6 / 12 Australia (en)



acc. to Safe Work Australia - Code of Practice

#### Van Gieson's Solution for microscopy

article number: 3925



Shall not be classified as acutely toxic.

# Acute toxicity estimate (ATE) of components of the mixture

Name of substance	CAS No	Exposure route	ATE
Picric acid	88-89-1	oral	200 <sup>mg</sup> / <sub>kg</sub>
Picric acid	88-89-1	dermal	300 <sup>mg</sup> / <sub>kg</sub>
Picric acid	88-89-1	inhalation: dust/mist	0.5 <sup>mg</sup> / <sub>l</sub> /4h

# Acute toxicity of components of the mixture

Name of substance	CAS No	Exposure route	Endpoint	Value	Species
Picric acid	88-89-1	oral	LD50	200 <sup>mg</sup> / <sub>kg</sub>	rat

#### Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

#### Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

#### Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

#### **Germ cell mutagenicity**

Shall not be classified as germ cell mutagenic.

#### Carcinogenicity

Shall not be classified as carcinogenic.

#### Reproductive toxicity

Shall not be classified as a reproductive toxicant.

# Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

## Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

#### **Aspiration hazard**

Shall not be classified as presenting an aspiration hazard.

# Symptoms related to the physical, chemical and toxicological characteristics

#### If swallowed

Data are not available.

#### If in eyes

Data are not available.

#### • If inhaled

Data are not available.

Australia (en) Page 7 / 12



acc. to Safe Work Australia - Code of Practice

#### Van Gieson's Solution for microscopy

article number: 3925

• If on skin

Data are not available.

#### 11.2 Endocrine disrupting properties

# **SECTION 12: Ecological information**

## 12.1 Toxicity

#### **Biodegradation**

The methods for determining the biological degradability are not applicable to inorganic substances.

#### 12.2 Process of degradability

Data are not available.

#### 12.3 Bioaccumulative potential

Data are not available.

#### Bioaccumulative potential of components of the mixture

Name of substance	CAS No	BCF	Log KOW	BOD5/COD
Picric acid	88-89-1		1.33	
Acid fuchsin	3244-88-0		-9.76	

#### 12.4 Mobility in soil

Data are not available.

#### 12.5 Results of PBT and vPvB assessment

Data are not available.

## 12.6 Endocrine disrupting properties

None of the ingredients are listed.

## 12.7 Other adverse effects

Data are not available.

# **SECTION 13: Disposal considerations**

#### Waste treatment methods



Consult the appropriate local waste disposal expert about waste disposal.

#### Sewage disposal-relevant information

Do not empty into drains.

Australia (en) Page 8 / 12



Other information

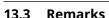
none

None of the ingredients are listed.

acc. to Safe Work Australia - Code of Practice

#### Van Gieson's Solution for microscopy

article number: 3925



Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.

# **SECTION 14: Transport information**

**14.1 UN number** not subject to transport regulations

14.2 UN proper shipping name not assigned
 14.3 Transport hazard class(es) not assigned
 14.4 Packing group not assigned

**14.5** Environmental hazards non-environmentally hazardous acc. to the dan-

gerous goods regulations

14.6 Special precautions for user

There is no additional information.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

The cargo is not intended to be carried in bulk.

## 14.8 Information for each of the UN Model Regulations

Transport informationNational regulationsAdditional information(UN RTDG)

Not subject to transport regulations. UN RTDG

International Maritime Dangerous Goods Code (IMDG) - Additional information

Not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Not subject to ICAO-IATA.

# **SECTION 15: Regulatory information**

**15.1** Safety, health and environmental regulations/legislation specific for the substance or mixture There is no additional information.

National regulations(Australia)

Australian Inventory of Chemical Substances(AICS)

All ingredients are listed or exempt from listing.

#### Other information

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

#### **National inventories**

Country	Inventory	Status
AU	AICS	all ingredients are listed
CA	DSL	all ingredients are listed
CN	IECSC	all ingredients are listed
EU	ECSI	all ingredients are listed
EU	REACH Reg.	all ingredients are listed

Australia (en) Page 9 / 12



acc. to Safe Work Australia - Code of Practice



article number: 3925



Country	Inventory	Status
JP	CSCL-ENCS	all ingredients are listed
KR	KECI	not all ingredients are listed
MX	INSQ	not all ingredients are listed
NZ	NZIoC	all ingredients are listed
PH	PICCS	all ingredients are listed
TW	TCSI	all ingredients are listed
US	TSCA	all ingredients are listed

Legend

AICS CSCL-ENCS

Australian Inventory of Chemical Substances List of Existing and New Chemical Substances (CSCL-ENCS)

DSL Domestic Substances List (DSL)
ECSI EC Substance Inventory (EINECS, ELINCS, NLP)
IECSC Inventory of Existing Chemical Substances Produced or Imported in China National Inventory of Chemical Substances
KECI Korea Existing Chemicals Inventory
NZIOC New Zealand Inventory of Chemicals
PICCS Philippine Inventory of Chemicals and Chemical Substances (PICCS)
REACH Reg. REACH registered substances
TCSI Taiwan Chemical Substances Inventory

Taiwan Chemical Substance Inventory Toxic Substance Control Act

#### 15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

## **SECTION 16: Other information**

#### Indication of changes (revised safety data sheet)

Alignment to regulation: Globally Harmonized System of Classification and Labelling of Chemicals ("Purple book").

Restructuring: section 9, section 14

Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
2.1	Classification acc. to GHS: This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC. This mixture does not meet the criteria for classification.	Classification acc. to GHS: This mixture does not meet the criteria for classification.	yes
2.2	Signal word: not required		yes
2.3	Other hazards: There is no additional information.	Other hazards	yes
2.3		Results of PBT and vPvB assessment: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.	yes

Australia (en) Page 10 / 12

acc. to Safe Work Australia - Code of Practice

# Van Gieson's Solution for microscopy

article number: 3925

# **Abbreviations and acronyms**



Abbr.	Descriptions of used abbreviations
Acute Tox.	Acute toxicity
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BOD	Biochemical Oxygen Demand
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value
COD	Chemical oxygen demand
DGR	Dangerous Goods Regulations (see IATA/DGR)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
Expl.	Explosive material
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
log KOW	n-Octanol/water
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
ppm	Parts per million
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
STEL	Short-term exposure limit
TWA	Time-weighted average
UN RTDG	UN Recommendations on the Transport of Dangerous Good
Unst. Expl.	Unstable explosive material
vPvB	Very Persistent and very Bioaccumulative
WES	Safe Work Australia: Workplace exposure standards for airborne contaminants

Australia (en) Page 11 / 12

acc. to Safe Work Australia - Code of Practice

#### Van Gieson's Solution for microscopy

article number: 3925



#### Key literature references and sources for data

Safe Work Australia's Code of Practice for Labelling of Workplace Hazardous Chemicals (under WHS Regulations).

UN Recommendations on the Transport of Dangerous Good. International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

#### **Classification procedure**

Physical and chemical properties. The classification is based on tested mixture. Health hazards. Environmental hazards. The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H201	Explosive; mass explosion hazard.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H331	Toxic if inhaled.

#### **Disclaimer**

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

Australia (en) Page 12 / 12

acc. to Safe Work Australia - Code of Practice

#### Resorcinol-Fuchsin solution according to Weigert for microscopy

date of compilation: 2017-01-18 article number: X877 Version: GHS 3.0 en Revision: 2021-10-25

Replaces version of: 2019-07-19

Version: (GHS 2)

# SECTION 1: Identification of the substance/mixture and of the company/ undertaking

#### **Product identifier** 1.1

Identification of the substance Resorcinol-Fuchsin solution according to Wei-

gert for microscopy

Article number X877

#### Relevant identified uses of the substance or mixture and uses advised against 1.2

Relevant identified uses: Laboratory chemical

Laboratory and analytical use

Uses advised against: Do not use for products which come into contact

with foodstuffs. Do not use for private purposes

(household).

#### 1.3 Details of the supplier of the safety data sheet

Carl Roth GmbH + Co KG Schoemperlenstr. 3-5 D-76185 Karlsruhe Germany

Telephone:+49 (0) 721 - 56 06 0 **Telefax:** +49 (0) 721 - 56 06 149 e-mail: sicherheit@carlroth.de Website: www.carlroth.de

Competent person responsible for the safety data :Department Health, Safety and Environment

sheet:

sicherheit@carlroth.de e-mail (competent person):

#### 1.4 **Emergency telephone number**

Name	Street	Postal code/city	Telephone	Website
NSW Poisons Information Centre Childrens Hospital	Hawkesbury Road	2145 West- mead, NSW	131126	

## **SECTION 2: Hazards identification**

#### Classification of the substance or mixture 2.1

#### Classification acc. to GHS

Section	Hazard class	Cat- egory	Hazard class and category	Hazard statement
2.6	Flammable liquid	2	Flam. Liq. 2	H225
2.16	Substance or mixture corrosive to metals	1	Met. Corr. 1	H290
3.2	Skin corrosion/irritation	2	Skin Irrit. 2	H315
3.3	Serious eye damage/eye irritation	1	Eye Dam. 1	H318
3.8	Specific target organ toxicity - single exposure	1	STOT SE 1	H370

Australia (en) Page 1 / 20

acc. to Safe Work Australia - Code of Practice



#### Resorcinol-Fuchsin solution according to Weigert for microscopy

article number: X877

Section	Hazard class	Cat- egory	Hazard class and category	Hazard statement
3.8D	Specific target organ toxicity - single exposure (narcotic effects, drowsiness)	3	STOT SE 3	H336

For full text of abbreviations: see SECTION 16

#### The most important adverse physicochemical, human health and environmental effects

Immediate effects can be expected after short-term exposure. The product is combustible and can be ignited by potential ignition sources.

#### 2.2 Label elements

#### Labelling

Signal word Danger

#### **Pictograms**

GHS02, GHS05, GHS07, GHS08









#### **Hazard statements**

H225	Highly flammable liquid and vapour
H290	May be corrosive to metals
H315	Causes skin irritation
H318	Causes serious eye damage
H336	May cause drowsiness or dizziness
H370	Causes damage to organs (eye)

#### **Precautionary statements**

#### **Precautionary statements - prevention**

P210	Keep away from heat/sparks/open flames/hot surfaces No smoking
P260	Do not breathe dust/fume/gas/mist/vapours/spray

#### **Precautionary statements - response**

P302+P352	IF ON SKIN: Wash	n with plenty o	of soap and water

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing

P370+P378 In case of fire: Use sand, carbon dioxide or powder extinguisher for extinction

#### **Precautionary statements - storage**

P403+P233 Store in a well-ventilated place. Keep container tightly closed

P403+P235 Store in a well-ventilated place. Keep cool

**Hazardous ingredients for labelling:** 2-Propanol, Methanol, Hydrochloric acid .... %,

Iron(III) chloride hexahydrate

Australia (en) Page 2 / 20

acc. to Safe Work Australia - Code of Practice



#### Resorcinol-Fuchsin solution according to Weigert for microscopy

article number: X877

#### 2.3 Other hazards

#### Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

## **Endocrine disrupting properties**

The mixture contains substance(s) with an endocrine disrupting potential.

# **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

not relevant (mixture)

#### 3.2 Mixtures

#### **Description of the mixture**

Name of sub- stance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes
2-Propanol	CAS No 67-63-0	50 – < 100	Flam. Liq. 2 / H225 Eye Irrit. 2 / H319 STOT SE 3 / H336	<b>(b) (!)</b>	
Methanol	CAS No 67-56-1	10 - < 25	Flam. Liq. 2 / H225 Acute Tox. 3 / H301 Acute Tox. 3 / H311 Acute Tox. 3 / H331 STOT SE 1 / H370		
Hydrochloric acid %	CAS No 7647-01-0	2-<10	Met. Corr. 1 / H290 Skin Corr. 1 / H314 Eye Dam. 1 / H318 STOT SE 3 / H335		B(a)
Iron(III) chloride hexahydrate	CAS No 10025-77-1	1-<3	Met. Corr. 1 / H290 Acute Tox. 4 / H302 Skin Irrit. 2 / H315 Eye Dam. 1 / H318		
Resorcinol	CAS No 108-46-3	<3	Acute Tox. 4 / H302 Skin Irrit. 2 / H315 Eye Irrit. 2 / H319	<u>(1)</u>	
Fuchsine	CAS No 632-99-5	<1	Carc. 2 / H351	<b></b>	IARC: 2B

Notes

B(a): The classification refers to an aqueous solution IARC: IARC group 2B: possibly carcinogenic to human

IARC group 2B: possibly carcinogenic to humans (International Agency for Research on Cancer)

2B:

For full text of abbreviations: see SECTION 16

Australia (en) Page 3 / 20

acc. to Safe Work Australia - Code of Practice



#### Resorcinol-Fuchsin solution according to Weigert for microscopy

article number: X877

#### **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures



#### **General notes**

Take off contaminated clothing.

## Following inhalation

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

#### Following skin contact

Rinse skin with water/shower. In case of skin irritation, consult a physician.

## Following eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

#### Following ingestion

Rinse mouth. Call a doctor if you feel unwell.

#### 4.2 Most important symptoms and effects, both acute and delayed

Drowsiness, Dizziness, Vertigo, Narcosis, Nausea, Vomiting, Irritation, Risk of serious damage to eyes

#### 4.3 Indication of any immediate medical attention and special treatment needed

none

# **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media



#### Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings water spray, alcohol resistant foam, dry extinguishing powder, BC-powder, carbon dioxide (CO<sub>2</sub>)

#### Unsuitable extinguishing media

water jet

# 5.2 Special hazards arising from the substance or mixture

Combustible. In case of insufficient ventilation and/or in use, may form flammable/explosive vapour-air mixture. Solvent vapours are heavier than air and may spread along floors. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures.

#### **Hazardous combustion products**

In case of fire may be liberated: Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>)

#### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

Australia (en) Page 4 / 20

acc. to Safe Work Australia - Code of Practice



#### Resorcinol-Fuchsin solution according to Weigert for microscopy

article number: X877

#### **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures



#### For non-emergency personnel

Use personal protective equipment as required. Avoid contact with skin, eyes and clothes. Do not breathe vapour/spray. Avoidance of ignition sources.

#### 6.2 Environmental precautions

Keep away from drains, surface and ground water. Danger of explosion.

#### 6.3 Methods and material for containment and cleaning up

#### Advice on how to contain a spill

Covering of drains.

#### Advice on how to clean up a spill

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

#### Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

#### 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

# **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

Provision of sufficient ventilation. Handle and open container with care. When not in use, keep containers tightly closed.

#### Measures to prevent fire as well as aerosol and dust generation



Keep away from sources of ignition - No smoking.

Take precautionary measures against static discharge. Due to danger of explosion, prevent leakage

of vapours into cellars, flues and ditches.

#### Advice on general occupational hygiene

Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs. When using do not smoke.

## 7.2 Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed.

Australia (en) Page 5 / 20

acc. to Safe Work Australia - Code of Practice

#### Resorcinol-Fuchsin solution according to Weigert for microscopy

article number: X877

## **Incompatible substances or mixtures**

Observe hints for combined storage.

#### Consideration of other advice:

Ground/bond container and receiving equipment.

#### **Ventilation requirements**

Use local and general ventilation.

#### Specific designs for storage rooms or vessels

Recommended storage temperature: 15 - 25 °C

#### 7.3 Specific end use(s)

No information available.

# **SECTION 8: Exposure controls/personal protection**

#### 8.1 **Control parameters**

#### **National limit values**

#### **Occupational exposure limit values (Workplace Exposure Limits)**

Cou ntr y	Name of agent	CAS No	Identi- fier	TW A [pp m]	TWA [mg/ m³]	STE L [pp m]	STEL [mg/ m³]	Ceil ing- C [pp m]	Ceil- ing-C [mg/ m³]	Nota- tion	Source
AU	resorcinol (m-di- hydroxybenzene)	108-46-3	WES	10	45	20	90				WES
AU	methyl alcohol (methanol)	67-56-1	WES	200	262	250	328				WES
AU	isopropyl alcohol (propan-2-ol)	67-63-0	WES	400	983	500	1,230				WES
AU	hydrogen chloride (hydrochloric acid)	7647-01- 0	WES					5	7.5		WES

#### Notation

Ceiling-C STEL

Ceiling value is a limit value above which exposure should not occur Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

**TWA** Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

#### Relevant DNELs of components of the mixture

Name of sub- stance	CAS No	End- point	Threshol d level	Protection goal, route of exposure	Used in	Exposure time
2-Propanol	67-63-0	DNEL	500 mg/m <sup>3</sup>	human, inhalat- ory	worker (industry)	chronic - systemic effects
2-Propanol	67-63-0	DNEL	888 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Methanol	67-56-1	DNEL	130 mg/m <sup>3</sup>	human, inhalat- ory	worker (industry)	chronic - systemic effects
Methanol	67-56-1	DNEL	130 mg/m³	human, inhalat- ory	worker (industry)	acute - systemic effects

Australia (en) Page 6 / 20

acc. to Safe Work Australia - Code of Practice



# Resorcinol-Fuchsin solution according to Weigert for microscopy

article number: X877

# Relevant DNELs of components of the mixture

	•								
Name of sub- stance	CAS No	End- point	Threshol d level	Protection goal, route of exposure	Used in	Exposure time			
Methanol	67-56-1	DNEL	130 mg/m <sup>3</sup>	human, inhalat- ory	worker (industry)	chronic - local ef- fects			
Methanol	67-56-1	DNEL	130 mg/m³	human, inhalat- ory	worker (industry)	acute - local ef- fects			
Methanol	67-56-1	DNEL	20 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects			
Methanol	67-56-1	DNEL	20 mg/kg bw/day	human, dermal	worker (industry)	acute - systemic effects			
Hydrochloric acid %	7647-01-0	DNEL	8 mg/m³	human, inhalat- ory	worker (industry)	chronic - local ef- fects			
Hydrochloric acid %	7647-01-0	DNEL	15 mg/m³	human, inhalat- ory	worker (industry)	acute - local ef- fects			
Iron(III) chloride hexahydrate	10025-77-1	DNEL	2.8 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects			
Resorcinol	108-46-3	DNEL	5.6 mg/m <sup>3</sup>	human, inhalat- ory	worker (industry)	chronic - systemic effects			
Resorcinol	108-46-3	DNEL	132.8 mg/ m³	human, inhalat- ory	worker (industry)	chronic - local ef- fects			
Resorcinol	108-46-3	DNEL	40 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects			

## **Relevant PNECs of components of the mixture**

Name of sub- stance	CAS No	End- point	Threshol d level	Organism	Environmental compartment	Exposure time			
2-Propanol	67-63-0	PNEC	140.9 <sup>mg</sup> / <sub>l</sub>	aquatic organ- isms	freshwater	short-term (single instance)			
2-Propanol	67-63-0	PNEC	140.9 <sup>mg</sup> / <sub>l</sub>	aquatic organ- isms	marine water	short-term (single instance)			
2-Propanol	67-63-0	PNEC	2,251 <sup>mg</sup> / <sub>l</sub>	aquatic organ- isms	sewage treatment plant (STP)	short-term (single instance)			
2-Propanol	67-63-0	PNEC	552 <sup>mg</sup> / <sub>kg</sub>	aquatic organ- isms	freshwater sedi- ment	short-term (single instance)			
2-Propanol	67-63-0	PNEC	552 <sup>mg</sup> / <sub>kg</sub>	aquatic organ- isms	marine sediment	short-term (single instance)			
2-Propanol	67-63-0	PNEC	28 <sup>mg</sup> / <sub>kg</sub>	terrestrial organ- isms	soil	short-term (single instance)			
Methanol	67-56-1	PNEC	20.8 <sup>mg</sup> / <sub>l</sub>	aquatic organ- isms	freshwater	short-term (single instance)			
Methanol	67-56-1	PNEC	2.08 <sup>mg</sup> / <sub>l</sub>	aquatic organ- isms	marine water	short-term (single instance)			
Methanol	67-56-1	PNEC	100 <sup>mg</sup> / <sub>l</sub>	aquatic organ- isms	sewage treatment plant (STP)	short-term (single instance)			
Methanol	67-56-1	PNEC	77 <sup>mg</sup> / <sub>kg</sub>	aquatic organ- isms	freshwater sedi- ment	short-term (single instance)			

Australia (en) Page 7 / 20

acc. to Safe Work Australia - Code of Practice



#### Resorcinol-Fuchsin solution according to Weigert for microscopy

article number: **X877** 

Name of sub- stance	CAS No	End- point	Threshol d level	Organism	Environmental compartment	Exposure time
Methanol	67-56-1	PNEC	7.7 <sup>mg</sup> / <sub>kg</sub>	aquatic organ- isms	marine sediment	short-term (single instance)
Methanol	67-56-1	PNEC	100 <sup>mg</sup> / <sub>kg</sub>	terrestrial organ- isms	soil	short-term (single instance)
Resorcinol	108-46-3	PNEC	0.017 <sup>mg</sup> / <sub>l</sub>	aquatic organ- isms	freshwater	short-term (single instance)
Resorcinol	108-46-3	PNEC	0.002 <sup>mg</sup> / <sub>l</sub>	aquatic organ- isms	marine water	short-term (single instance)
Resorcinol	108-46-3	PNEC	0.79 <sup>mg</sup> / <sub>l</sub>	aquatic organ- isms	sewage treatment plant (STP)	short-term (single instance)
Resorcinol	108-46-3	PNEC	0.08 <sup>mg</sup> / <sub>kg</sub>	aquatic organ- isms	freshwater sedi- ment	short-term (single instance)
Resorcinol	108-46-3	PNEC	0.008 <sup>mg</sup> / kg	aquatic organ- isms	marine sediment	short-term (single instance)
Resorcinol	108-46-3	PNEC	10 <sup>mg</sup> / <sub>kg</sub>	terrestrial organ- isms	soil	short-term (single instance)

## 8.2 Exposure controls

**Individual protection measures (personal protective equipment)** 

#### **Eve/face protection**





Use safety goggle with side protection.

#### Skin protection



#### hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The times are approximate values from measurements at 22 ° C and permanent contact. Increased temperatures due to heated substances, body heat etc. and a reduction of the effective layer thickness by stretching can lead to a considerable reduction of the breakthrough time. If in doubt, contact manufacturer. At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved. The data apply only to the pure substance. When transferred to substance mixtures, they may only be considered as a guide.

type of material

NBR (Nitrile rubber)

material thickness

0,4 mm

Australia (en) Page 8 / 20

acc. to Safe Work Australia - Code of Practice

# ROTH

#### Resorcinol-Fuchsin solution according to Weigert for microscopy

article number: X877

#### breakthrough times of the glove material

>480 minutes (permeation: level 6)

#### other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

Flame-retardant protective clothing.

#### **Respiratory protection**





Respiratory protection necessary at: Aerosol or mist formation. Type: A (against organic gases and vapours with a boiling point of > 65 °C , colour code: Brown).

#### **Environmental exposure controls**

Keep away from drains, surface and ground water.

# **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

Physical state liquid
Colour violet

Odour like: - alcohol
Melting point/freezing point not determined

Boiling point or initial boiling point and boiling

range

>65 °C

Flammability flammable liquid in accordance with GHS criteria

Lower and upper explosion limit 2 vol% (LEL) - 13.4 vol% (UEL)

data apply to the main component

Flash point 12 °C (data apply to the main component)

Auto-ignition temperature 425 °C (data apply to the main component)

Decomposition temperature not relevant pH (value) <3 (20 °C)

Kinematic viscosity not determined

Solubility(ies)

Water solubility miscible in any proportion

Partition coefficient

Partition coefficient n-octanol/water (log value): this information is not available

Vapour pressure 43 hPa at 20 °C

data apply to the main component

Australia (en) Page 9 / 20

acc. to Safe Work Australia - Code of Practice



#### Resorcinol-Fuchsin solution according to Weigert for microscopy

article number: X877

Density  $\sim 0.9 \, {\rm ^g/_{cm^3}}$  at 20  $^{\circ}$ C

Relative vapour density information on this property is not available

Particle characteristics not relevant (liquid)

Other safety parameters

Oxidising properties none

9.2 Other information

Information with regard to physical hazard

classes:

Corrosive to metals category 1: corrosive to metals

Other safety characteristics:

Miscibility completely miscible with water

# **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

The mixture contains reactive substance(s). Risk of ignition. Substance or mixture corrosive to metals. Vapours may form explosive mixtures with air.

#### If heated

Risk of ignition.

#### 10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

## 10.3 Possibility of hazardous reactions

**Violent reaction with:** Aldehydes, Alkali metals, Nitric acid, strong oxidiser, **Danger of explosion:** Chlorates, Hydrogen peroxide, Nitro compound

#### 10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

#### 10.5 Incompatible materials

plastic and rubber, different metals

#### 10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

Australia (en) Page 10 / 20

acc. to Safe Work Australia - Code of Practice



#### Resorcinol-Fuchsin solution according to Weigert for microscopy

article number: X877

# **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

Test data are not available for the complete mixture.

#### **Classification procedure**

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### Classification acc. to GHS

#### **Acute toxicity**

Shall not be classified as acutely toxic.

## Acute toxicity estimate (ATE) of components of the mixture

Name of substance	CAS No	Exposure route	ATE
Iron(III) chloride hexahydrate	10025-77-1	oral	500 <sup>mg</sup> / <sub>kg</sub>
Resorcinol	108-46-3	oral	510 <sup>mg</sup> / <sub>kg</sub>

#### Acute toxicity of components of the mixture

Name of substance	CAS No	Exposure route	Endpoint	Value	Species
2-Propanol	67-63-0	inhalation: va- pour	LC50	37.5 <sup>mg</sup> / <sub>l</sub> /4h	rat
2-Propanol	67-63-0	oral	LD50	5,045 <sup>mg</sup> / <sub>kg</sub>	rat
2-Propanol	67-63-0	dermal	LD50	12,800 <sup>mg</sup> / <sub>kg</sub>	rabbit
Methanol	67-56-1	inhalation: va- pour	LC50	131 <sup>mg</sup> / <sub>l</sub> /4h	rat
Methanol	67-56-1	oral	LD50	5,628 <sup>mg</sup> / <sub>kg</sub>	rat
Methanol	67-56-1	oral	LDLo	143 <sup>mg</sup> / <sub>kg</sub>	human
Methanol	67-56-1	dermal	LD50	15,800 <sup>mg</sup> / <sub>kg</sub>	rabbit
Iron(III) chloride hexahydrate	10025-77-1	oral	LD50	500 <sup>mg</sup> / <sub>kg</sub>	rat
Iron(III) chloride hexahydrate	10025-77-1	dermal	LD50	>2,000 <sup>mg</sup> / <sub>kg</sub>	rat
Resorcinol	108-46-3	oral	LD50	510 <sup>mg</sup> / <sub>kg</sub>	rat
Resorcinol	108-46-3	dermal	LD50	2,830 <sup>mg</sup> / <sub>kg</sub>	rabbit
Fuchsine	632-99-5	oral	LD50	>2,000 <sup>mg</sup> / <sub>kg</sub>	monkey

#### Skin corrosion/irritation

Causes skin irritation.

# Serious eye damage/eye irritation

Causes serious eye damage.

#### Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Australia (en) Page 11 / 20

acc. to Safe Work Australia - Code of Practice



#### Resorcinol-Fuchsin solution according to Weigert for microscopy

article number: X877

#### **Germ cell mutagenicity**

Shall not be classified as germ cell mutagenic.

#### Carcinogenicity

Shall not be classified as carcinogenic.

#### Reproductive toxicity

Shall not be classified as a reproductive toxicant.

#### Specific target organ toxicity - single exposure

Causes damage to organs (eye). May cause drowsiness or dizziness.

Hazard category	Target organ	Exposure route
1	eye	if exposed

#### Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

#### **Aspiration hazard**

Shall not be classified as presenting an aspiration hazard.

#### Symptoms related to the physical, chemical and toxicological characteristics

#### If swallowed

vomiting, nausea

#### • If in eyes

Causes serious eye damage, risk of blindness

#### If inhaled

vertigo, dizziness, headache, fatigue, narcosis

#### • If on skin

Prolonged or repeated skin contact may cause removal of natural fat from the skin resulting in dermatitis (skin inflammation), risk of absorption via the skin, causes skin irritation

#### Other information

none

# 11.2 Endocrine disrupting properties

The mixture contains substance(s) with an endocrine disrupting potential.

# **SECTION 12: Ecological information**

#### 12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute) of components of the mixture					
Name of sub- stance	CAS No	Endpoint	Value	Species	Exposure time
2-Propanol	67-63-0	LC50	9,640 <sup>mg</sup> / <sub>l</sub>	Pimephales promelas	96 h
Methanol	67-56-1	LC50	15,400 <sup>mg</sup> / <sub>l</sub>	fish	96 h
Methanol	67-56-1	ErC50	22,000 <sup>mg</sup> / <sub>l</sub>	algae	96 h

Australia (en) Page 12 / 20

acc. to Safe Work Australia - Code of Practice



# Resorcinol-Fuchsin solution according to Weigert for microscopy

article number: X877

Aquatic toxicity (acute) of components of the mixture				
Name of sub- stance	CAS No	Endpoint	Value	

Name of sub- stance	CAS No	Endpoint	Value	Species	Exposure time
Resorcinol	108-46-3	LC50	26.8 <sup>mg</sup> / <sub>l</sub>	fish	96 h
Resorcinol	108-46-3	ErC50	>97 <sup>mg</sup> / <sub>l</sub>	algae	72 h
Fuchsine	632-99-5	LC50	6.8 <sup>mg</sup> / <sub>l</sub>	fish	24 h

# Aquatic toxicity (chronic) of components of the mixture

Name of sub- stance	CAS No	Endpoint	Value	Species	Exposure time
2-Propanol	67-63-0	LC50	>10,000 <sup>mg</sup> / <sub>l</sub>	aquatic invertebrates	24 h
Resorcinol	108-46-3	EC50	260 <sup>mg</sup> / <sub>l</sub>	fish	60 d
Resorcinol	108-46-3	EC50	>172 <sup>µg</sup> / <sub>I</sub>	aquatic invertebrates	21 d

## **Biodegradation**

Data are not available.

## 12.2 Process of degradability

## Degradability of components of the mixture

Name of substance	CAS No	Process	Degrada- tion rate	Time	Method	Source
2-Propanol	67-63-0	biotic/abiotic	95 %	21 d	modifizierter OECD Screen- ing Test	
2-Propanol	67-63-0	oxygen deple- tion	53 %	5 d		ECHA
Methanol	67-56-1	biotic/abiotic	99 %	30 d		
Methanol	67-56-1	oxygen deple- tion	69 %	5 d		ECHA
Resorcinol	108-46-3	biotic/abiotic	66.7 %	14 d		

## 12.3 Bioaccumulative potential

Data are not available.

## Bioaccumulative potential of components of the mixture

Name of substance	CAS No	BCF	Log KOW	BOD5/COD
2-Propanol	67-63-0		0.05	
Methanol	67-56-1		-0.77	
Resorcinol	108-46-3	3.16	0.8 (20 °C)	
Fuchsine	632-99-5		1.632 (pH value: 6.3, 25 °C)	

## 12.4 Mobility in soil

Data are not available.

Australia (en) Page 13 / 20

acc. to Safe Work Australia - Code of Practice



#### Resorcinol-Fuchsin solution according to Weigert for microscopy

article number: X877

#### 12.5 Results of PBT and vPvB assessment

Data are not available.

#### 12.6 Endocrine disrupting properties

The mixture contains substance(s) with an endocrine disrupting potential.

#### 12.7 Other adverse effects

Data are not available.

# **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods



This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Sewage disposal-relevant information

Do not empty into drains.

#### Waste treatment of containers/packagings

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

#### Relevant provisions relating to waste(Basel Convention)

#### Properties of waste which render it hazardous

**H3** Flammable liquids

**H11** Toxic (Delayed or chronic)

#### 13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.

# **SECTION 14: Transport information**

#### 14.1 UN number

UN RTDG UN 2924

IMDG-Code UN 2924 ICAO-TI UN 2924

14.2 UN proper shipping name

**UN RTDG** FLAMMABLE LIQUID, CORROSIVE, N.O.S. IMDG-Code FLAMMABLE LIQUID, CORROSIVE, N.O.S.

ICAO-TI Flammable liquid, corrosive, n.o.s.

Technical name (hazardous ingredients) 2-Propanol, Hydrochloric acid .... %

14.3 Transport hazard class(es)

UN RTDG 3 (8)

IMDG-Code 3 (8)

Australia (en) Page 14 / 20

acc. to Safe Work Australia - Code of Practice



#### Resorcinol-Fuchsin solution according to Weigert for microscopy

article	numb	oer:	X877
---------	------	------	------

ICAO-TI 3 (8)

14.4 Packing group

II **UN RTDG IMDG-Code** II ICAO-TI II

14.5 Environmental hazards non-environmentally hazardous acc. to the dan-

gerous goods regulations

14.6 Special precautions for user

There is no additional information.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

The cargo is not intended to be carried in bulk.

#### 14.8 Information for each of the UN Model Regulations

Transport informationNational regulationsAdditional information(UN RTDG)

**UN number** 2924 Class 3 Subsidiary risk(s) 8 **Packing group** Π Danger label(s) 3+8





**Special provisions (SP)** 274

**UN RTDG** 

**Excepted quantities (EQ)** 

**UN RTDG** 

Limited quantities (LQ)

**UN RTDG** 

#### International Maritime Dangerous Goods Code (IMDG) - Additional information

Proper shipping name FLAMMABLE LIQUID, CORROSIVE, N.O.S.

Particulars in the shipper's declaration UN2924, FLAMMABLE LIQUID, CORROSIVE,

N.O.S., (contains: 2-Propanol, Hydrochloric acid .... %), 3 (8), II, 12°C c.c.

Marine pollutant

Danger label(s) 3+8





Special provisions (SP) 274 Excepted quantities (EQ) E2 Limited quantities (LQ) 1 L F-E, S-C **EmS** 

Australia (en) Page 15 / 20

acc. to Safe Work Australia - Code of Practice



#### Resorcinol-Fuchsin solution according to Weigert for microscopy

article number: X877

Stowage category B

#### International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Proper shipping name Flammable liquid, corrosive, n.o.s.

Particulars in the shipper's declaration UN2924, Flammable liquid, corrosive, n.o.s., (con-

tains: 2-Propanol, Hydrochloric acid .... %), 3 (8), II

Danger label(s) 3+8





Special provisions (SP)

Excepted quantities (EQ)

Limited quantities (LQ)

A3

E2

Limited quantities (LQ)

# **SECTION 15: Regulatory information**

**15.1** Safety, health and environmental regulations/legislation specific for the substance or mixture There is no additional information.

National regulations(Australia)

#### Australian Inventory of Chemical Substances(AICS)

All ingredients are listed or exempt from listing.

#### Other information

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

#### **UN Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances**

Name of substance	CAS No	Listed in	HS code
Hydrochloric acid %	7647-01-0	Table II	2806.10

#### **National inventories**

Country	Inventory	Status
AU	AICS	all ingredients are listed
CA	DSL	not all ingredients are listed
CN	IECSC	all ingredients are listed
EU	ECSI	not all ingredients are listed
EU	REACH Reg.	all ingredients are listed
JP	CSCL-ENCS	not all ingredients are listed
JP	ISHA-ENCS	not all ingredients are listed
KR	KECI	not all ingredients are listed
MX	INSQ	not all ingredients are listed
NZ	NZIoC	all ingredients are listed
PH	PICCS	all ingredients are listed

Australia (en) Page 16 / 20

acc. to Safe Work Australia - Code of Practice



#### Resorcinol-Fuchsin solution according to Weigert for microscopy

article number: X877

Country	Inventory	Status
TR	CICR	not all ingredients are listed
TW	TCSI	all ingredients are listed
US	TSCA	not all ingredients are listed

Legend

Australian Inventory of Chemical Substances Chemical Inventory and Control Regulation List of Existing and New Chemical Substances (CSCL-ENCS) AICS CICR

CICK CSCL-ENCS DSL ECSI IECSC

CSCL-ENCS
DSL
Domestic Substances List (DSL)
ECSI
ECSI
Inventory of Existing Chemical Substances Produced or Imported in China
INSQ
INSQ
INVENTIGATION
INVENTIGATION
INVENTIGATION
INSO
INVENTIGATION

#### 15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

## **SECTION 16: Other information**

#### Indication of changes (revised safety data sheet)

Alignment to regulation: Globally Harmonized System of Classification and Labelling of Chemicals ("Purple book").

Restructuring: section 9, section 14

Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
2.1		Classification acc. to GHS: change in the listing (table)	yes
2.1	The most important adverse physicochemical, human health and environmental effects: Narcotic effects.	The most important adverse physicochemical, human health and environmental effects: Immediate effects can be expected after short- term exposure. The product is combustible and can be ignited by potential ignition sources.	yes
2.2		Hazard statements: change in the listing (table)	yes
2.2		Precautionary statements - prevention: change in the listing (table)	yes
2.2		Precautionary statements - response: change in the listing (table)	yes
2.2	Hazardous ingredients for labelling: Methanol, 2-Propanol, Iron(III) chloride	Hazardous ingredients for labelling: 2-Propanol, Methanol, Hydrochloric acid %, Iron(III) chloride hexahydrate	yes
2.2	Labelling of packages where the contents do not exceed 125 ml: Signal word: Danger		yes
2.2		Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)	yes

Australia (en) Page 17 / 20

acc. to Safe Work Australia - Code of Practice



# Resorcinol-Fuchsin solution according to Weigert for microscopy

article number: X877

Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
2.2		Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)	yes
2.2		Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)	yes
2.2	contains: Methanol, 2-Propanol, Iron(III) chloride		yes
2.3	Other hazards: There is no additional information.	Other hazards	yes
2.3		Results of PBT and vPvB assessment: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.	yes
2.3		Endocrine disrupting properties: The mixture contains substance(s) with an endocrine disrupting potential.	yes

# **Abbreviations and acronyms**

Abbr.	Descriptions of used abbreviations
Acute Tox.	Acute toxicity
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BOD	Biochemical Oxygen Demand
Carc.	Carcinogenicity
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances
Ceiling-C	Ceiling value
COD	Chemical oxygen demand
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
Flam. Liq.	Flammable liquid
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Na tions

Australia (en) Page 18 / 20

acc. to Safe Work Australia - Code of Practice



#### Resorcinol-Fuchsin solution according to Weigert for microscopy

article number: X877

Abbr.	Descriptions of used abbreviations	
HS	Harmonized Commodity Description and Coding System (Harmonized System, drawn up by the World Customs Organisation)	
IARC	International Agency for Research on Cancer	
IATA	International Air Transport Association	
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)	
ICAO	International Civil Aviation Organization	
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air	
IMDG	International Maritime Dangerous Goods Code	
IMDG-Code	International Maritime Dangerous Goods Code	
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval	
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval	
LEL	Lower explosion limit (LEL)	
log KOW	n-Octanol/water	
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")	
Met. Corr.	Substance or mixture corrosive to metals	
NLP	No-Longer Polymer	
PBT	Persistent, Bioaccumulative and Toxic	
PNEC	Predicted No-Effect Concentration	
ppm	Parts per million	
Skin Corr.	Corrosive to skin	
Skin Irrit.	Irritant to skin	
STEL	Short-term exposure limit	
STOT SE	Specific target organ toxicity - single exposure	
TWA	Time-weighted average	
UEL	Upper explosion limit (UEL)	
UN RTDG	UN Recommendations on the Transport of Dangerous Good	
vPvB	Very Persistent and very Bioaccumulative	
WES	Safe Work Australia: Workplace exposure standards for airborne contaminants	

#### Key literature references and sources for data

Safe Work Australia's Code of Practice for Labelling of Workplace Hazardous Chemicals (under WHS Regulations).

UN Recommendations on the Transport of Dangerous Good. International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

#### **Classification procedure**

Physical and chemical properties. The classification is based on tested mixture. Health hazards. Environmental hazards. The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Australia (en) Page 19 / 20

acc. to Safe Work Australia - Code of Practice



# Resorcinol-Fuchsin solution according to Weigert for microscopy

article number: X877

# List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H225	Highly flammable liquid and vapour.
H290	May be corrosive to metals.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H370	Causes damage to organs (eye).

#### Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

Australia (en) Page 20 / 20