acc. to Regulation (EC) No. 1907/2006 (REACH)



Acetonitrile with 0,1 % Formic acid ROTISOLV® ≥99,9 %, LC-MS-Grade

article number: **CP00**Version: **2.0 en**date of compilation: 2021-08-27
Revision: 2024-03-02

Replaces version of: 2021-08-27

Version: (1)

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

1.1 Product identifier

Identification of the substance Acetonitrile with 0,1 % Formic acid ROTISOLV®

≥99,9 %, LC-MS-Grade

Article number CP00

 Index No (GB CLP)
 608-001-00-3

 EC number
 200-835-2

 CAS number
 75-05-8

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 private purposes (household).

Food, drink and animal feedingstuffs.

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
Natio	onal Poisons Information Service City Hospital	Dudley Rd	B187QH Birmingham	844 892 0111	

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification acc. to GHS

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Section	Hazard class	Cat- egory	Hazard class and category	Hazard statement
2.6	Flammable liquid	2	Flam. Liq. 2	H225
3.10	Acute toxicity (oral)	4	Acute Tox. 4	H302
3.1D	Acute toxicity (dermal)	4	Acute Tox. 4	H312
3.1I	Acute toxicity (inhal.)	4	Acute Tox. 4	H332
3.3	Serious eye damage/eye irritation	2	Eye Irrit. 2	H319

For full text of abbreviations: see SECTION 16

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

H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled

H319 Causes serious eye irritation

Precautionary statements

Precautionary statements - prevention

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking

P280 Wear protective gloves/protective clothing/eye protection/face protection

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

Precautionary statements - storage

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

2.3 Other hazards

Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of \geq 0,1%.

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SECTION 3: Composition/information on ingredients

3.1 Substances

Name of substance Acetonitrile with 0,1 % Formic acid

Molecular formula C₂H₃N

Molar mass $41,05 \, {}^{9}/_{mol}$

CAS No 75-05-8

EC No 200-835-2

Index No (GB CLP) 608-001-00-3

Impurities/additives/constituents:

Name of substance	Identifier	Wt%
Formic acid	CAS No 64-18-6	0,1
	EC No 200-579-1	
	Index No 607-001-00-0	

Substance, Specific Conc. Limits, M-factors, ATE

Specific Conc. Limits	M-Factors	ATE	Exposure route
-	-	469 ^{mg} / _{kg} 1.100 ^{mg} / _k g 11 ^{mg} / _l /4h	oral dermal inhalation: vapour

Remarks

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.

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Following ingestion

Rinse mouth with water (only if the person is conscious). Call a doctor.

4.2 Most important symptoms and effects, both acute and delayed

After eye contact: Irritant effects, Conjunctival redness of the eyes, Following skin contact: Localised redness, oedema, pruritis and/or pain, Following ingestion: Vomiting, Irritation, Headaches and dizziness may occur, Following inhalation: Cough, pain, choking, and breathing difficulties

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 (CO₂)

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. 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 (CO₂)

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

Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. Do not breathe vapour/spray. Avoidance of ignition sources.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

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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

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

Keep container tightly closed.

Incompatible substances or mixtures

Observe hints for combined storage.

Consideration of other advice:

Ground/bond container and receiving equipment.

Ventilation requirements

Keep any substance that emits harmful vapours or gases in a place that allows these to be permanently extracted. 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.

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SECTION 8: Exposure controls/personal protection

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
EU	acetonitrile	75-05-8	IOELV	40	70					Τ	2006/15/ EC
GB	acetonitrile	75-05-8	WEL	40	68	60	102				EH40/ 2005

Notation

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

Absorbed through the skin

Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-H STEL

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

hours time-weighted average (unless otherwise specified)

Relevant DNELs of components

Name of sub- stance	CAS No	End- point	Threshol d level	Protection goal, route of exposure	Used in	Exposure time
Formic acid	64-18-6	DNEL	9,5 mg/m³	human, inhalat- ory	worker (industry)	chronic - local ef- fects

Environmental values

Relevant PNECs and other threshold levels

End- point	Threshold level	d Organism Environmental compartment		Exposure time
PNEC	10 ^{mg} / _l	aquatic organisms	freshwater	short-term (single instance)
PNEC	1 ^{mg} / _l	aquatic organisms	marine water	short-term (single instance)
PNEC	32 ^{mg} / _l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
PNEC	40,5 ^{mg} / _{kg}	aquatic organisms	freshwater sediment	short-term (single instance)
PNEC	4,05 ^{mg} / _{kg}	aquatic organisms	marine sediment	short-term (single instance)
PNEC	2,23 ^{mg} / _{kg}	terrestrial organisms	soil	short-term (single instance)

Relevant PNECs of components

Name of sub- stance	CAS No	End- point	Threshol d level	Organism	Environmental compartment	Exposure time	
Formic acid	64-18-6	PNEC	2 ^{mg} / _l	aquatic organ- isms	freshwater	short-term (single instance)	
Formic acid	64-18-6	PNEC	0,2 ^{mg} / _l	aquatic organ- isms	marine water	short-term (single instance)	

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Relevant PNECs of components

Name of sub- stance	CAS No	End- point Threshol d level		Organism	Environmental compartment	Exposure time
Formic acid	64-18-6	PNEC	7,2 ^{mg} / _l	aquatic organ- isms	sewage treatment plant (STP)	short-term (single instance)
Formic acid	64-18-6	PNEC	13,4 ^{mg} / _{kg}	aquatic organ- isms	freshwater sedi- ment	short-term (single instance)
Formic acid	64-18-6	PNEC	1,34 ^{mg} / _{kg}	aquatic organ- isms	marine sediment	short-term (single instance)
Formic acid	64-18-6	PNEC	1,5 ^{mg} / _{kg}	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 guide.

type of material

Butyl caoutchouc (butyl rubber)

material thickness

0,5 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.

Flame-retardant protective clothing.

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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 colourless

Odour faintly perceptible - like ether

Melting point/freezing point -45,7 °C

Boiling point or initial boiling point and boiling

range

81,65 °C at 1.013 hPa (ECHA)

Flammability flammable liquid in accordance with GHS criteria

Lower and upper explosion limit 3 vol% (LEL) - 17 vol% (UEL)

Flash point 12,8 °C at 1.013 hPa (ECHA)

Auto-ignition temperature 524 °C at 1.013 hPa (ECHA)

Decomposition temperature not relevant pH (value) not determined Kinematic viscosity $0,443 \, ^{\text{mm}^2} / _{\text{s}}$ at 20 °C Dynamic viscosity 0,35 mPa s at 20 °C

Solubility(ies)

Water solubility miscible in any proportion

Partition coefficient

Partition coefficient n-octanol/water (log value): -0,34 (pH value: ~7, 25 °C) (ECHA)

Vapour pressure 94,51 hPa at 20 °C

Density and/or relative density

Density $0.79 \, {}^{\rm g}/{}_{\rm cm^3}$ at 20 °C (ECHA)

Relative vapour density Information on this property is not available.

Particle characteristics not relevant (liquid)

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Other safety parameters

Oxidising properties none

9.2 Other information

Information with regard to physical hazard

classes:

There is no additional information.

Other safety characteristics:

Miscibility completely miscible with water

SECTION 10: Stability and reactivity

10.1 Reactivity

It's a reactive substance. 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

Violent reaction with: strong oxidiser, Peroxides, Strong acid

10.4 Conditions to avoid

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

10.5 Incompatible materials

Rubber articles

10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Classification acc. to GHS

Acute toxicity

Harmful if swallowed. Harmful in contact with skin. Harmful if inhaled.

Acute toxicity											
Exposure route	Endpoint	Value	Species	Method	Source						
oral	LD50	469 ^{mg} / _{kg}	mouse		ECHA						
dermal	LD50	>2.000 ^{mg} / _{kg}	rabbit		ECHA						

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Acute toxicity of components

Name of substance	CAS No	Exposure route	Endpoint	Value	Species
Formic acid	64-18-6	oral	LD50	730 ^{mg} / _{kg}	rat
Formic acid	64-18-6	inhalation: va- pour	LC50	7,85 ^{mg} / _l /4h	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

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

vomiting, nausea, dizziness

• If in eyes

Causes serious eye irritation

• If inhaled

cough, pain, choking, and breathing difficulties

• If on skin

Prolonged or repeated contact with skin or mucous membrane result in irritation symptoms such as redness, blistering, dermatitis, etc

• Other information

none

11.2 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of \geq 0,1%.

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72 h

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11.3 Information on other hazards

There is no additional information.

SECTION 12: Ecological information

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute)										
Endpoint	Value	Species	Source	Exposure time						
LC50	1.640 ^{mg} / _l	fish	ECHA	96 h						
ErC50	9.696 ^{mg} / _I	algae	ECHA	72 h						

Aquatic toxicity (acute) of components Exposure Name of sub-**CAS No Endpoint Value Species** stance time Formic acid 64-18-6 LC50 130 mg/_I fish 96 h Formic acid 64-18-6 EC50 365 mg/_I aquatic invertebrates 48 h

ErC50

Aquatic toxicity (chronic)					
Endpoint	Value	Species	Source	Exposure time	
EC50	>1.000 ^{mg} / _l	microorganisms	ECHA	30 min	

1.240 ^{mg}/_l

algae

12.2 Persistence and degradability

Formic acid

Theoretical Oxygen Demand (without nitrification): 1,559 $^{\rm mg}/_{\rm mg}$ Theoretical Oxygen Demand (with nitrification): 3,118 $^{\rm mg}/_{\rm mg}$ Theoretical Carbon Dioxide: 2,144 $^{\rm mg}/_{\rm mg}$

64-18-6

Biodegradation

The substance is readily biodegradable.

Process of degradability				
Process	Degradation rate	Time		
biotic/abiotic	98 %	28 d		
carbon dioxide generation	70 %	21 d		

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Degradability of components

Name of substance	CAS No	Process	Degrada- tion rate	Time	Method	Source
Formic acid	64-18-6	biotic/abiotic	98 %	14 d		
Formic acid	64-18-6	oxygen deple- tion	15 %	5 d		ECHA
Formic acid	64-18-6	DOC removal	4 %	6 d		ECHA

12.3 Bioaccumulative potential

Does not significantly accumulate in organisms.

n-octanol/water (log KOW)	-0,34 (pH value: ~7, 25 °C) (ECHA)

Bioaccumulative potential of components

Name of substance	CAS No	BCF	Log KOW	BOD5/COD
Formic acid 64-18-6			-2,1 (pH value: 7, 23 °C)	

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

Does not contain an endocrine disruptor (ED) at a concentration of \geq 0,1%.

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

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Handle contaminated packages in the same way as the substance itself. Completely emptied packages can be recycled.

13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

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Properties of waste which render it hazardous

HP3 flammable

HP 4 irritant - skin irritation and eye damage

HP 6 acute toxicity

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. Non-contaminated packages may be recycled.

SECTION 14: Transport information

14.1 UN number or ID number

ADRRID UN 1648
IMDG-Code UN 1648
ICAO-TI UN 1648

14.2 UN proper shipping name

ADRRID ACETONITRILE IMDG-Code ACETONITRILE ICAO-TI Acetonitrile

14.3 Transport hazard class(es)

ADRRID 3
IMDG-Code 3
ICAO-TI 3

14.4 Packing group

ADRRID 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

Provisions for dangerous goods (ADR) should be complied within the premises.

14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

14.8 Information for each of the UN Model Regulations

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)Additional information

Proper shipping name ACETONITRILE

Particulars in the transport document UN1648, ACETONITRILE, 3, II, (D/E)

Classification code F1
Danger label(s) 3

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Emergency Action Code	2YE
Hazard identification No	33
Tunnel restriction code (TRC)	D/E
Transport category (TC)	2
Limited quantities (LQ)	1 L
Excepted quantities (EQ)	E2

Regulations concerning the International Carriage of Dangerous Goods by Rail (RID)Additional information

Classification code F1

Danger label(s) 3



Excepted quantities (EQ) E2
Limited quantities (LQ) 1 L
Transport category (TC) 2
Hazard identification No 33

International Maritime Dangerous Goods Code (IMDG) - Additional information

Proper shipping name ACETONITRILE

Particulars in the shipper's declaration UN1648, ACETONITRILE, 3, II, 12,8°C c.c.

Marine pollutant Danger label(s) 3



Excepted quantities (EQ) E2
Limited quantities (LQ) 1 L
EmS F-E, S-D
Stowage category B

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

Proper shipping name Acetonitrile

Particulars in the shipper's declaration UN1648, Acetonitrile, 3, II

Danger label(s) 3



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

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SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Relevant provisions of the European Union (EU)

Seveso Directive

2012/	2012/18/EU (Seveso III)						
No	Dangerous substance/hazard categories	Qualifying quantity (tonnes) for the application of lower and upper-tier requirements					
P5c	flammable liquids (cat. 2, 3)	5.000	50.000	51)			

Notation

51) Flammable liquids, categories 2 or 3 not covered by P5a and P5b

Deco-Paint Directive

VOC content	100 %
VOC content	790 ⁹ / _I

Industrial Emissions Directive (IED)

VOC content	100 %
VOC content	790 ^g / _l

Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

not listed

Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

not listed

Water Framework Directive (WFD)

not listed

Regulation on the marketing and use of explosives precursors

not listed

Regulation on drug precursors

not listed

Regulation on substances that deplete the ozone layer (ODS)

not listed

Regulation concerning the export and import of hazardous chemicals (PIC)

not listed

Regulation on persistent organic pollutants (POP)

not listed

National regulations(GB)

List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list

not listed

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Restrictions according to GB REACH, Annex 17

Dangerous substances with restrictions (GB REACH, Annex 17)

Name of substance	Name acc. to inventory	CAS No	No
Acetonitrile with 0,1 % Formic acid	this product meets the criteria for classi- fication in accordance with Regulation No 1272/2008/EC		3
Acetonitrile with 0,1 % Formic acid	flammable / pyrophoric		40

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	AIIC	substance is listed
CA	DSL	substance is listed
CN	IECSC	substance is listed
EU	ECSI	substance is listed
EU	REACH Reg.	substance is listed
JP	CSCL-ENCS	substance is listed
KR	KECI	substance is listed
MX	INSQ	substance is listed
NZ	NZIoC	substance is listed
PH	PICCS	substance is listed
TR	CICR	substance is listed
TW	TCSI	substance is listed
US	TSCA	substance is listed (ACTIVE)
VN	NCI	substance is listed

Legend

AIIC Australian Inventory of Industrial Chemicals
CICR Chemical Inventory and Control Regulation
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
INSQ National Inventory of Chemical Substances
KECI Korea Existing Chemicals Inventory
NCI National Chemical Inventory
NZIOC New Zealand Inventory of Chemicals
PICCS Philippine Inventory of Chemicals and Chemical Substances (PICCS)
REACH Reg. REACH registered substances
TCSI Taiwan Chemical Substance Inventory
Toxic Substance Control Act

TCSI TSCA

Toxic Substance Control Act

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance.

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SECTION 16: Other information

Indication of changes (revised safety data sheet)

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: 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
2.3		Endocrine disrupting properties: Does not contain an endocrine disruptor (ED) at a concentration of ≥ 0,1%.	yes
14.8		Regulations concerning the International Car- riage of Dangerous Goods by Rail (RID)Addition- al information	yes
14.8		Classification code: F1	yes
14.8		Danger label(s): 3	yes
14.8		Danger label(s): change in the listing (table)	yes
14.8		Excepted quantities (EQ): E2	yes
14.8		Limited quantities (LQ): 1 L	yes
14.8		Transport category (TC): 2	yes
14.8		Hazard identification No: 33	yes
15.1	Restrictions according to REACH, Annex XVII		yes
15.1		Dangerous substances with restrictions (REACH, Annex XVII): change in the listing (table)	yes
15.1	List of substances subject to authorisation (REACH, Annex XIV)/SVHC - candidate list: Not listed.		yes
15.1	VOC content: 100 % , 790 ^g / _l	VOC content: 100 %	yes
15.1		VOC content: 790 ^g / _l	yes
15.1		National regulations(GB)	yes
15.1		List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list: not listed	yes

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Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
15.1		Restrictions according to GB REACH, Annex 17	yes
15.1		Dangerous substances with restrictions (GB REACH, Annex 17): change in the listing (table)	yes
15.1		National inventories: change in the listing (table)	yes

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
2006/15/EC	Commission Directive establishing a second list of indicative occupational exposure limit values in imp mentation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concer ing the International Carriage of Dangerous Goods by Road)
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BOD	Biochemical Oxygen Demand
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substance
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 causin 50 % changes in response (e.g. on growth) during a specified time interval
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an ide fier of substances commercially available within the EU (European Union)
ED	Endocrine disruptor
EH40/2005	EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-licence/)
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
GB CLP	The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendmen etc.) (EU Exit) Regulations 2019, SI 2019/720 (as amended)
GB REACH	The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United N tions
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)

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Abbr.	Descriptions of used abbreviations	
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	
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008	
IOELV	Indicative occupational exposure limit value	
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	
NLP	No-Longer Polymer	
PBT	Persistent, Bioaccumulative and Toxic	
PNEC	Predicted No-Effect Concentration	
ppm	Parts per million	
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals	
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)	
STEL	Short-term exposure limit	
TWA	Time-weighted average	
UEL	Upper explosion limit (UEL)	
VOC	Volatile Organic Compounds	
vPvB	Very Persistent and very Bioaccumulative	
WEL	Workplace exposure limit	

Key literature references and sources for data

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

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

Code	Text
H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.

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Disclaimer

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

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