

# Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



## Roti®-Histokitt II, mounting medium, for histology

article number: **T160**  
Version: **2.0 en**  
Replaces version of: 04.08.2016  
Version: (1)

date of compilation: 04.08.2016  
Revision: 26.07.2019

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

#### 1.1 Product identifier

Identification of the substance	<b>Roti®-Histokitt II</b>
Article number	T160
Registration number (REACH)	not relevant (mixture)

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

<b>Identified uses:</b>	laboratory chemical laboratory and analytical use
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#### 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](mailto:sicherheit@carlroth.de)

**Website:** [www.carlroth.de](http://www.carlroth.de)

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

**e-mail (competent person)** : [sicherheit@carlroth.de](mailto:sicherheit@carlroth.de)

#### 1.4 Emergency telephone number

Emergency information service **Poison Centre Munich: +49/(0)89 19240**

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

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

Classification acc. to GHS			
Section	Hazard class	Hazard class and category	Hazard statement
2.6	flammable liquid	(Flam. Liq. 3)	H226
3.1D	acute toxicity (dermal)	(Acute Tox. 4)	H312
3.2	skin corrosion/irritation	(Skin Irrit. 2)	H315
3.3	serious eye damage/eye irritation	(Eye Irrit. 2)	H319
3.8R	specific target organ toxicity - single exposure (respiratory tract irritation)	(STOT SE 3)	H335
3.9	specific target organ toxicity - repeated exposure	(STOT RE 2)	H373

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### Supplemental hazard information

Code	Supplemental hazard information
EUH208	contains Methacrylic acid methyl ester, n-Butyl methacrylate. May produce an allergic reaction

## 2.2 Label elements

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

#### Signal word

Warning

#### Pictograms

GHS02, GHS07,  
GHS08



#### Hazard statements

H226	Flammable liquid and vapour
H312	Harmful in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H373	May cause damage to organs (kidney, liver, central nervous system) through prolonged or repeated exposure

#### Precautionary statements

##### Precautionary statements - prevention

P210	Keep away from heat, sparks, open flames, hot surfaces. No smoking.
P280	Wear protective gloves/protective clothing.

##### Precautionary statements - response

P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P314	Get medical advice/attention if you feel unwell.

#### Supplemental hazard information

EUH208	Contains Methacrylic acid methyl ester, n-Butyl methacrylate. May produce an allergic reaction.
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**Hazardous ingredients for labelling:** Xylene (isomers)

Labelling of packages where the contents do not exceed 125 ml

Signal word: **Warning**

Symbol(s)



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EUH208  
contains: Contains Methacrylic acid methyl ester, n-Butyl methacrylate. May produce an allergic reaction.  
Xylene (isomers)

### 2.3 Other hazards

There is no additional information.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

#### Description of the mixture

Composition/information on ingredients.

Name of substance	Identifier	wt%	Classification acc. to 1272/2008/EC	Pictograms
Xylene (isomers)	CAS No 1330-20-7  EC No 215-535-7  Index No 601-022-00-9	40 – 70	Flam. Liq. 3 / H226 Acute Tox. 4 / H312 Acute Tox. 4 / H332 Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 STOT SE 3 / H335 STOT RE 2 / H373 Asp. Tox. 1 / H304	
Methacrylic acid methyl ester	CAS No 80-62-6  EC No 201-297-1  Index No 607-035-00-6	< 1	Flam. Liq. 2 / H225 Skin Irrit. 2 / H315 Skin Sens. 1 / H317 STOT SE 3 / H335	
n-Butyl methacrylate	CAS No 97-88-1  EC No 202-615-1  Index No 607-033-00-5	< 1	Flam. Liq. 3 / H226 Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Skin Sens. 1 / H317 STOT SE 3 / H335	

#### Remarks

For full text of Hazard- and EU Hazard-statements: see SECTION 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures



#### General notes

Take off immediately all contaminated clothing. Symptoms can occur only after several hours.

#### 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.

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### 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

Irritant effects, Cough, Dyspnoea, Dizziness, Headache, Allergic reactions, Nausea, Vomiting

### 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 fire-fighting measures to the fire surroundings  
water spray, foam, dry extinguishing powder, carbon dioxide (CO<sub>2</sub>)

#### Unsuitable extinguishing media

water jet

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

Combustible. Vapours are heavier than air, spread along floors and form explosive mixtures with air. Vapours can form explosive mixtures with air.

#### Hazardous combustion products

May produce toxic fumes of carbon monoxide if burning.

### 5.3 Advice for firefighters

Vapours are heavier than air. Beware of reignition. 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

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. Explosive properties.

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

#### Advice on how to contain a spill

Covering of drains.

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### Advice on how to clean up a spill

Absorb with liquid-binding material (e.g. 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

Provide adequate ventilation as well as local exhaustion at critical locations. Avoid exposure. 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.

### 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. Protect from sunlight.

#### 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

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

Country	Name of agent	CAS No	Notation	Identifier	TWA [ppm]	TWA [mg/m <sup>3</sup> ]	STEL [ppm]	STEL [mg/m <sup>3</sup> ]	Source
EU	xylene	1330-20-7		IOELV	50	221	100	442	2000/39/EC
EU	methyl methacrylate	80-62-6		IOELV	50		100		2009/161/EU
MT	xylene, mixture of isomers	1330-20-7		OELV	50	221	100	442	CAP. 424
MT	methyl methacrylate	80-62-6		OELV	50		100		CAP. 424

#### Notation

STEL 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/DMELs/PNECs and other threshold levels

#### • relevant DNELs of components of the mixture

Name of substance	CAS No	Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Xylene (isomers)	1330-20-7	DNEL	221 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
Xylene (isomers)	1330-20-7	DNEL	442 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	acute - systemic effects
Xylene (isomers)	1330-20-7	DNEL	221 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - local effects
Xylene (isomers)	1330-20-7	DNEL	442 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	acute - local effects
Xylene (isomers)	1330-20-7	DNEL	212 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Methacrylic acid methyl ester	80-62-6	DNEL	208 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
Methacrylic acid methyl ester	80-62-6	DNEL	208 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - local effects
Methacrylic acid methyl ester	80-62-6	DNEL	13,67 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects

#### • relevant PNECs of components of the mixture

Name of substance	CAS No	Endpoint	Threshold level	Environmental compartment	Exposure time
Xylene (isomers)	1330-20-7	PNEC	0,327 mg/l	freshwater	short-term (single instance)
Xylene (isomers)	1330-20-7	PNEC	0,327 mg/l	marine water	short-term (single instance)
Xylene (isomers)	1330-20-7	PNEC	6,58 mg/l	sewage treatment plant (STP)	short-term (single instance)
Xylene (isomers)	1330-20-7	PNEC	12,46 mg/kg	freshwater sediment	short-term (single instance)

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Name of substance	CAS No	Endpoint	Threshold level	Environmental compartment	Exposure time
Xylene (isomers)	1330-20-7	PNEC	12,46 mg/kg	marine sediment	short-term (single instance)
Xylene (isomers)	1330-20-7	PNEC	2,31 mg/kg	soil	short-term (single instance)
Methacrylic acid methyl ester	80-62-6	PNEC	0,94 mg/l	water	intermittent release
Methacrylic acid methyl ester	80-62-6	PNEC	0,94 mg/l	freshwater	short-term (single instance)
Methacrylic acid methyl ester	80-62-6	PNEC	0,94 mg/l	marine water	short-term (single instance)
Methacrylic acid methyl ester	80-62-6	PNEC	10 mg/l	sewage treatment plant (STP)	short-term (single instance)
Methacrylic acid methyl ester	80-62-6	PNEC	5,74 mg/kg	freshwater sediment	short-term (single instance)
Methacrylic acid methyl ester	80-62-6	PNEC	1,47 mg/kg	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

FKM (fluoro rubber)

##### • material thickness

0,4 mm.

##### • breakthrough times of the glove material

>480 minutes (permeation: level 6)

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### • 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

#### Appearance

Physical state	liquid (viscous)
Colour	clear
Odour	characteristic
Odour threshold	No data available

#### Other physical and chemical parameters

pH (value)	This information is not available.
Melting point/freezing point	not determined
Initial boiling point and boiling range	137 °C at 1.013 hPa
Flash point	23 °C
Evaporation rate	no data available
Flammability (solid, gas)	not relevant (fluid)
<u>Explosive limits</u>	
• lower explosion limit (LEL)	1,1 vol% (data apply to the main component)
• upper explosion limit (UEL)	7 vol% (data apply to the main component)
Explosion limits of dust clouds	not relevant
Vapour pressure	8,21 hPa at 20 °C (Data apply to the main component)
Density	0,95 g/cm <sup>3</sup> at 20 °C
Vapour density	3,7 at 20 °C (air = 1) (Data apply to the main component)
Bulk density	Not applicable
Relative density	Information on this property is not available.
<u>Solubility(ies)</u>	
Water solubility	200 mg/l at 20 °C (data apply to the main component)



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Solubility in hydrocarbons, aromatic	soluble
<u>Partition coefficient</u>	
n-octanol/water (log KOW)	This information is not available.
Auto-ignition temperature	>250 °C
Decomposition temperature	no data available
Viscosity	
• kinematic viscosity	473,7 mm <sup>2</sup> /s
• dynamic viscosity	250 – 450 mPa s at 20 °C (Brookfield)
Explosive properties	Shall not be classified as explosive
Oxidising properties	none

### 9.2 Other information

Temperature class (EU, acc. to ATEX)	T3 (Maximum permissible surface temperature on the equipment: 200°C)
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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Risk of ignition. Vapours can form explosive mixtures with air.

### 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: Oxidisers, Nitric acid, Sulphuric acid, Sulphur

### 10.4 Conditions to avoid

Keep away from heat.

### 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

#### Acute toxicity

##### • Acute toxicity of components of the mixture

Name of substance	CAS No	Exposure route	ATE
Xylene (isomers)	1330-20-7	dermal	1.100 mg/kg
Xylene (isomers)	1330-20-7	inhalation: vapour	11 mg/l/4h

#### Skin corrosion/irritation

Causes skin irritation.

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### Serious eye damage/eye irritation

Causes serious eye irritation.

### Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

### Summary of evaluation of the CMR properties

Shall not be classified as germ cell mutagenic, carcinogenic nor as a reproductive toxicant

#### • Specific target organ toxicity - single exposure

May cause respiratory irritation.

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

May cause damage to organs (kidney, liver, central nervous system) through prolonged or repeated exposure.

### Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

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

#### • If swallowed

nausea, vomiting

#### • If in eyes

Causes serious eye irritation

#### • If inhaled

irritant effects, cough, breathing difficulties

#### • If on skin

causes skin irritation, risk of absorption via the skin

### Other information

Other adverse effects: Headache, Dizziness, Liver and kidney damage, Symptoms can occur only after several hours

## SECTION 12: Ecological information

### 12.1 Toxicity

acc. to 1272/2008/EC: Shall not be classified as hazardous to the aquatic environment.

#### Aquatic toxicity (acute)

#### Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Xylene (isomers)	1330-20-7	LC50	2,6 mg/l	rainbow trout	96 h
Xylene (isomers)	1330-20-7	ErC50	4,7 mg/l	algae	72 h
Methacrylic acid methyl ester	80-62-6	LC50	>79 mg/l	fish	96 h
Methacrylic acid methyl ester	80-62-6	EC50	69 mg/l	aquatic invertebrates	48 h
Methacrylic acid methyl ester	80-62-6	ErC50	>110 mg/l	algae	72 h

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Name of substance	CAS No	Endpoint	Value	Species	Exposure time
n-Butyl methacrylate	97-88-1	LC50	5,57 mg/l	japanese ricefish/ medaka ( <i>Oryzias latipes</i> )	96 h
n-Butyl methacrylate	97-88-1	EC50	25,4 mg/l	daphnia magna	48 h

### Aquatic toxicity (chronic)

#### Aquatic toxicity (chronic) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Xylene (isomers)	1330-20-7	EC50	2,2 mg/l	algae	73 h
Methacrylic acid methyl ester	80-62-6	EC50	49 mg/l	aquatic invertebrates	21 d

### 12.2 Process of degradability

Data are not available.

#### Degradability of components of the mixture

Name of substance	CAS No	Process	Degradation rate	Time
Xylene (isomers)	1330-20-7	oxygen depletion	98 %	28 d
Methacrylic acid methyl ester	80-62-6	biotic/abiotic	>94 %	148 d
Methacrylic acid methyl ester	80-62-6	oxygen depletion	94 %	14 d
n-Butyl methacrylate	97-88-1	biotic/abiotic	88 %	28 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
Xylene (isomers)	1330-20-7	>5,5 - <12,2	3,15 (pH value: 7, 20 °C)	
Methacrylic acid methyl ester	80-62-6		1,38 (pH value: ~7, 20 °C)	
n-Butyl methacrylate	97-88-1		3,03 (25 °C)	

### 12.4 Mobility in soil

Data are not available.

### 12.5 Results of PBT and vPvB assessment

Data are not available.

### 12.6 Other adverse effects

Data are not available.

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### 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.

##### 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.


#### 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.

#### 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	1307
14.2	UN proper shipping name	<b>XYLENES</b>
	Hazardous ingredients	Xylene (isomers), Methacrylic acid methyl ester
14.3	Transport hazard class(es)	
	Class	3 (flammable liquids)
14.4	Packing group	III (substance presenting low danger)
14.5	Environmental hazards	none (non-environmentally hazardous acc. to the dangerous goods regulations)
14.6	<b>Special precautions for user</b>	
	Provisions for dangerous goods (ADR) should be complied within the premises.	
14.7	<b>Transport in bulk according to Annex II of MARPOL and the IBC Code</b>	
	The cargo is not intended to be carried in bulk.	
14.8	<b>Information for each of the UN Model Regulations</b>	
	• <b>Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)</b>	
	UN number	1307

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Proper shipping name	XYLENES
Particulars in the transport document	UN1307, XYLENES, 3, III, (D/E)
Class	3
Classification code	F1
Packing group	III
Danger label(s)	3



Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
Transport category (TC)	3
Tunnel restriction code (TRC)	D/E
Hazard identification No	30

### • International Maritime Dangerous Goods Code (IMDG)

UN number	1307
Proper shipping name	XYLENES
Particulars in the shipper's declaration	UN1307, XYLENES, 3, III, 23°C c.c.
Class	3
Marine pollutant	-
Packing group	III
Danger label(s)	3



Special provisions (SP)	223
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
EmS	F-E, S-D
Stowage category	A

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

UN number	1307
Proper shipping name	Xylenes
Particulars in the shipper's declaration	UN1307, Xylenes, 3, III
Class	3
Packing group	III
Danger label(s)	3

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Special provisions (SP)	A3
Excepted quantities (EQ)	E1
Limited quantities (LQ)	10 L

### 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)

- **Regulation 649/2012/EU concerning the export and import of hazardous chemicals (PIC)**

None of the ingredients are listed.

- **Regulation 1005/2009/EC on substances that deplete the ozone layer (ODS)**

None of the ingredients are listed.

- **Regulation 850/2004/EC on persistent organic pollutants (POP)**

None of the ingredients are listed.

- **Restrictions according to REACH, Annex XVII**

Name of substance	CAS No	Wt%	Type of registration	Conditions of restriction	No
Roti®-Histokitt II		100	1907/2006/EC annex XVII	R3	3
n-Butyl methacrylate		0,9	1907/2006/EC annex XVII	R40	40
Xylene (isomers)		55	1907/2006/EC annex XVII	R40	40
Methacrylic acid methyl ester		0,9	1907/2006/EC annex XVII	R40	40

##### Legend

R3

1. Shall not be used in:
  - ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
  - tricks and jokes,
  - games for one or more participants, or any article intended to be used as such, even with ornamental aspects,
2. Articles not complying with paragraph 1 shall not be placed on the market.
3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they:
  - can be used as fuel in decorative oil lamps for supply to the general public, and,
  - present an aspiration hazard and are labelled with R65 or H304,
4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN).
5. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met:
  - (a) lamp oils, labelled with R65 or H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: 'Keep lamps filled with this liquid out of the reach of children'; and, by 1 December 2010, 'Just a sip of lamp oil - or even sucking the wick of lamps - may lead to life-threatening lung damage';
  - (b) grill lighter fluids, labelled with R65 or H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: 'Just a sip of grill lighter may lead to life threatening lung damage';
  - (c) lamp oils and grill lighters, labelled with R65 or H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.
6. No later than 1 June 2014, the Commission shall request the European Chemicals Agency to prepare a dossier, in accordance with Article 69 of the present Regulation with a view to ban, if appropriate, grill lighter fluids and fuel for decorative lamps, labelled R65 or H304, intended for supply to the general public.
7. Natural or legal persons placing on the market for the first time lamp oils and grill lighter fluids, labelled with

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### Legend

- R65 or H304, shall by 1 December 2011, and annually thereafter, provide data on alternatives to lamp oils and grill lighter fluids labelled R65 or H304 to the competent authority in the Member State concerned. Member States shall make those data available to the Commission.
- R40
1. Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following:
    - metallic glitter intended mainly for decoration,
    - artificial snow and frost,
    - 'whoopie' cushions,
    - silly string aerosols,
    - imitation excrement,
    - horns for parties,
    - decorative flakes and foams,
    - artificial cobwebs,
    - stink bombs.
  2. Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with:  
'For professional users only'.
  3. By way of derogation, paragraphs 1 and 2 shall not apply to the aerosol dispensers referred to Article 8 (1a) of Council Directive 75/324/EEC (2).
  4. The aerosol dispensers referred to in paragraphs 1 and 2 shall not be placed on the market unless they conform to the requirements indicated.

### • Restrictions according to REACH, Title VIII

None.

### • List of substances subject to authorisation (REACH, Annex XIV)/SVHC - candidate list

none of the ingredients are listed

### • Seveso Directive

2012/18/EU (Seveso III)				
No	Dangerous substance/hazard categories	Qualifying quantity (tonnes) for the application of lower and upper-tier requirements		Notes
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

### • Directive 75/324/EEC relating to aerosol dispensers

#### Filling batch

#### Deco-Paint Directive (2004/42/EC)

VOC content	100 % 950 g/l
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#### Directive on industrial emissions (VOCs, 2010/75/EU)

VOC content	100 %
VOC content	950 g/l

### Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) - Annex II

None of the ingredients are listed.

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### Regulation 166/2006/EC concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

Name of substance	CAS No	Remarks	Threshold for re-releases to air (kg/year)	Threshold for re-releases to water (kg/year)	Threshold for re-releases to land (kg/year)
Xylene (isomers)	1330-20-7	(17) (11)		200 (as BTEX)	200 (as BTEX)

#### Legend

- (11) Single pollutants are to be reported if the threshold for BTEX (the sum parameter of benzene, toluene, ethyl benzene, xylenes) is exceeded  
(17) Total mass of xylene (ortho-xylene, meta-xylene, para-xylene)

### Directive 2000/60/EC establishing a framework for Community action in the field of water policy (WFD)

None of the ingredients are listed.

### Regulation 98/2013/EU on the marketing and use of explosives precursors

none of the ingredients are listed

### Regulation 111/2005/EC laying down rules for the monitoring of trade between the Community and third countries in drug precursors

none of the ingredients are listed

### National inventories

Country	National inventories	Status
AU	AICS	not all ingredients are listed
CA	DSL	not all ingredients are listed
CN	IECSC	not all ingredients are listed
EU	ECSI	not all ingredients are listed
EU	REACH Reg.	not 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	not all ingredients are listed
PH	PICCS	not all ingredients are listed
TR	CICR	not all ingredients are listed
TW	TCSI	not all ingredients are listed
US	TSCA	not all ingredients are listed

#### Legend

- AICS Australian Inventory of Chemical Substances  
CICR Chemical Inventory and Control Regulation  
CSCL-ENCS 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  
INSQ National Inventory of Chemical Substances  
KECI Korea Existing Chemicals Inventory  
NZIoC New Zealand Inventory of Chemicals  
PICCS Philippine Inventory of Chemicals and Chemical Substances  
REACH Reg. REACH registered substances  
TCSI Taiwan Chemical Substance Inventory



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### Legend

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

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

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
2.1		Classification acc. to GHS: change in the listing (table)	yes
2.1		Supplemental hazard information: change in the listing (table)	yes
2.1	Remarks: For full text of Hazard- and EU Hazard-statements: see SECTION 16.		yes
2.2	Signal word: Danger	Signal word: Warning	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		Supplemental hazard information: change in the listing (table)	yes
2.2	Labelling of packages where the contents do not exceed 125 ml: Signal word: Danger	Labelling of packages where the contents do not exceed 125 ml: Signal word: Warning	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
3.2		Description of the mixture: change in the listing (table)	yes
8.1		Occupational exposure limit values (Workplace Exposure Limits): change in the listing (table)	yes
8.1		• relevant DNELs of components of the mixture: change in the listing (table)	yes
8.1		• relevant PNECs of components of the mixture: change in the listing (table)	yes
14.2	Hazardous ingredients: Xylene (isomers)	Hazardous ingredients: Xylene (isomers), Methacrylic acid methyl ester	yes

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Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
14.3	Transport hazard class(es)	Transport hazard class(es): class 3 hazard - flammable liquids	yes
14.8		Marine pollutant: -	yes
14.8		• International Civil Aviation Organization (ICAO-IATA/DGR)	yes
14.8		UN number: 1307	yes
14.8		Proper shipping name: Xylenes	yes
14.8		Particulars in the shipper's declaration: UN1307, Xylenes, 3, III	yes
14.8		Class: 3	yes
14.8		Packing group: III	yes
14.8		Danger label(s): 3	yes
14.8		Danger label(s): change in the listing (table)	yes
14.8		Special provisions (SP): A3	yes
14.8		Excepted quantities (EQ): E1	yes
14.8		Limited quantities (LQ): 10 L	yes

### Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
2000/39/EC	Commission Directive establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC
2009/161/EU	Commission Directive establishing a third list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Commission Directive 2000/39/EC
Acute Tox.	acute toxicity
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
Asp. Tox.	aspiration hazard
ATE	Acute Toxicity Estimate
BCF	bioconcentration factor
BOD	Biochemical Oxygen Demand
CAP. 424	Occupational Health and Safety Authority Act (CAP. 424)
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

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Abbr.	Descriptions of used abbreviations
CMR	Carcinogenic, Mutagenic or toxic for Reproduction
COD	chemical oxygen demand
DGR	Dangerous Goods Regulations (see IATA/DGR)
DMEL	Derived Minimal Effect Level
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
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
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 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
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
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
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)
Skin Corr.	corrosive to skin
Skin Irrit.	irritant to skin
Skin Sens.	skin sensitisation
STEL	short-term exposure limit

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Abbr.	Descriptions of used abbreviations
STOT RE	specific target organ toxicity - repeated exposure
STOT SE	specific target organ toxicity - single exposure
SVHC	Substance of Very High Concern
TWA	time-weighted average
VOC	Volatile Organic Compounds
vPvB	very Persistent and very Bioaccumulative

### Key literature references and sources for data

- Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU
- Regulation (EC) No. 1272/2008 (CLP, EU GHS)
- Dangerous Goods Regulations (DGR) for the air transport (IATA)
- International Maritime Dangerous Goods Code (IMDG)

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

Code	Text
H225	highly flammable liquid and vapour
H226	flammable liquid and vapour
H304	may be fatal if swallowed and enters airways
H312	harmful in contact with skin
H315	causes skin irritation
H317	may cause an allergic skin reaction
H319	causes serious eye irritation
H332	harmful if inhaled
H335	may cause respiratory irritation
H373	may cause damage to organs (kidney, liver, central nervous system) through prolonged or repeated exposure

### Disclaimer

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.