

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:  
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008



Revision date: 25-Aug-2021

Revision Number: 1

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

### 1.1. Product identifier

**Product Name:** Kluthe KS 2 RAL 9005

Article number: 021210339005

UFI: M8W1-Y87J-TQME-J0VQ

Hazard components for labeling: Contains n-Butyl acetate, xylene (reaction product of xylene and ethylbenzene), Bisphenol A diglycidyl ether, Maleic anhydride, Fatty acids, C14-18 and C16-18-unsaturated, maleated

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

Product categories [PC]: PC9 - Coatings and paints, fillers, putties, thinners

Sector of uses [SU]: SU19 - Building and construction work

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

Supplier: conti coatings GmbH & Co. KG  
Feldstrasse 55  
D - 46149 Oberhausen  
Telefon: +49 208/ 9948-0  
Telefax: +49 208/ 650625  
www.conticoatings.com

E-mail address: sds.ob@conticoatings.com

### 1.4. Emergency telephone number

Emergency Telephone: +49 177 / 214 4737 (24 h)

<b>Emergency Telephone - §45 - (EC)1272/2008</b>	
<b>Europe</b>	112
<b>Austria</b>	+43 1 406 43 43 (Giftinformationszentrale)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

<b>Flammable liquids</b>	Category 3 - (H226)
<b>Skin corrosion/irritation</b>	Category 2 - (H315)
<b>Serious eye damage/eye irritation</b>	Category 2 - (H319)
<b>Skin sensitization</b>	Category 1A - (H317)
<b>Specific target organ toxicity (single exposure)</b>	Category 3 - (H336)
<b>Specific target organ toxicity (repeated exposure)</b>	Category 2 - (H373)
<b>Chronic aquatic toxicity</b>	Category 3 - (H412)

### 2.2. Label elements

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008



Revision date: 25-Aug-2021

Kluthe KS 2 RAL 9005 - 021210339005

Revision Number: 1



Signal word: **Warning**

## Hazard components for labeling:

Contains n-Butyl acetate, xylene (reaction product of xylene and ethylbenzene), Bisphenol A diglycidyl ether, Maleic anhydride, Fatty acids, C14-18 and C16-18-unsaturated, maleated

## Hazard statements:

H226 - Flammable liquid and vapor.

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

H336 - May cause drowsiness or dizziness.

H373 - May cause damage to organs through prolonged or repeated exposure.

H412 - Harmful to aquatic life with long lasting effects.

## EU Specific Hazard Statements:

### Precautionary Statements - EU (§28, 1272/2008):

P101 - If medical advice is needed, have product container or label at hand

P102 - Keep out of reach of children

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P271 - Use only outdoors or in a well-ventilated area

P405 - Store locked up

P501 - Dispose of contents/ container to an approved waste disposal plant

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P370 + P378 - In case of fire: Use dry chemical, CO<sub>2</sub>, water spray or alcohol-resistant foam to extinguish

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

## Additional information

This product requires tactile warnings if supplied to the general public.

## 2.3. Other hazards

Toxic to aquatic life.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Not applicable

### 3.2 Mixtures

Chemical name	CAS No	EC No	REACH registration number	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Weight-%
n-Butyl acetate	123-86-4	204-658-1	01-2119485493-29	Flam. Liq. 3 (H226)	10 - < 25

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008



Revision date: 25-Aug-2021

Revision Number: 1

Kluthe KS 2 RAL 9005 - 021210339005

				STOT SE 3 (H336) (EUH066)	
xylene (reaction product of xylene and ethylbenzene)	-	905-588-0	01-2119539452-40	Flam. Liq. 3 (H226) Asp. Tox. 1 (H304) Skin Irrit. 2 (H315) Eye Irrit. 2A (H319) Acute Tox. 4 (H312) Acute Tox. 4 (H332) STOT SE 3 (H335) STOT RE 2 (H373)	10 - < 25
hydrocarbons, C9, aromats	-	918-668-5	01-2119455851-35	Flam. Liq. 3 (H226) Asp. Tox. 1 (H304) STOT SE 3 (H335) STOT SE 3 (H336) Aquatic Chronic 2 (H411) (EUH066)	5 - < 10
Bisphenol A diglycidyl ether	1675-54-3	216-823-5	01-2119456619-36	Skin Irrit. 2 (H315) Skin Sens. 1 (H317) Eye Irrit. 2 (H319) Aquatic Chronic 2 (H411)	0.5 - < 1
Fatty acids, C14-18 and C16-18-unsaturated, maleated	85711-46-2	288-306-2	01-2119978273-29	Skin Irrit. 2 (H315) Skin Sens. 1B (H317) Eye Irrit. 2 (H319)	0.1 - < 0.25
Quartz	14808-60-7	238-878-4	-	[B]	0.005 - < 0.01
Methyl methacrylate	80-62-6	201-297-1	-	Flam. Liq. 2 (H225) Skin Irrit. 2 (H315) Skin Sens. 1 (H317) STOT SE 3 (H335)	0.005 - < 0.01
Maleic anhydride	108-31-6	203-571-6	01-2119472428-31	Acute Tox. 4 (H302) Skin Corr. 1B (H314) Skin Sens. 1A (H317) Eye Dam. 1 (H318) Resp. Sens. 1 (H334) STOT RE 1 (H372) (EUH071)	0.001 - < 0.005

[B] - Substance with a Community workplace exposure limit

[I] - Restricted substance per REACH Annex XVII

Chemical name	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)	Notes
Bisphenol A diglycidyl ether 1675-54-3	Skin Irrit. 2 :: C>=5% Eye Irrit. 2 :: C>=5%			
Methyl methacrylate 80-62-6	STOT SE 3 :: C>=10%			D
Maleic anhydride 108-31-6	Skin Sens. 1A :: C>=0.001%			

## Acute Toxicity Estimate:

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATE<sub>mix</sub>) for classifying a mixture based on its components

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008



Revision date: 25-Aug-2021

Revision Number: 1

Kluthé KS 2 RAL 9005 - 021210339005

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapor - mg/L	Inhalation LC50 - 4 hour - gas - ppm
n-Butyl acetate 123-86-4	10768	17060	No data available	23.4	No data available
xylene (reaction product of xylene and ethylbenzene) -	3523	12126	1.5	27.1	No data available
hydrocarbons, C9, aromats -	3592	3200	No data available	No data available	No data available
Bisphenol A diglycidyl ether 1675-54-3	2002	2002	No data available	No data available	No data available
Methyl methacrylate 80-62-6	8420	5000	No data available	29.0421	No data available
Maleic anhydride 108-31-6	1090	2620	0.00435	No data available	No data available

## hazardous components above-mentioned substances/ substance mixtures:

Chemical name	CAS No	EC No	REACH registration number	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Weight-%
Xylenes (o-, m-, p- isomers) 1330-20-7	1330-20-7	215-535-7	01-2119488216-32	Flam. Liq. 3 (H226) Acute Tox. 4 (H312) Skin Irrit. 2 (H315) Acute Tox. 4 (H332)	5 - < 10
Ethylbenzene 100-41-4	100-41-4	202-849-4	01-2119489370-35	Flam. Liq. 2 (H225) Asp. Tox. 1 (H304) Acute Tox. 4 (H332) STOT RE 2 (H373)	1 - < 3

Full text of H- and EUH-phrases: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

General advice:	Show this safety data sheet to the doctor in attendance.
Inhalation:	Remove to fresh air. IF exposed or concerned: Get medical advice/attention. Get medical attention immediately if symptoms occur.
Eye contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Skin contact:	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician.
Ingestion:	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician.
Self-protection of the first aider:	Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008



Revision date: 25-Aug-2021

Kluthe KS 2 RAL 9005 - 021210339005

Revision Number: 1

information. Avoid contact with skin, eyes or clothing.

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

Symptoms: Itching. Rashes. Hives. May cause redness and tearing of the eyes. Burning sensation. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

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

Note to physicians: May cause sensitization in susceptible persons. Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable Extinguishing Media: Dry chemical. Carbon dioxide (CO<sub>2</sub>). Water spray. Alcohol resistant foam.

Large Fire: CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media: Do not scatter spilled material with high pressure water streams.

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

Specific hazards arising from the chemical: Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Product is or contains a sensitizer. May cause sensitization by skin contact.

### 5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters: Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## SECTION 6: Accidental release measures

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

Personal precautions: Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material.

Other information: Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

For emergency responders: Use personal protection recommended in Section 8.

### 6.2. Environmental precautions

Environmental precautions: Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008



Revision date: 25-Aug-2021

Kluthe KS 2 RAL 9005 - 021210339005

Revision Number: 1

spillage if safe to do so. Prevent product from entering drains.

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

Methods for containment: Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up: Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

Prevention of secondary hazards: Clean contaminated objects and areas thoroughly observing environmental regulations.

## 6.4. Reference to other sections

Reference to other sections: See section 8 for more information. See section 13 for more information.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling



Advice on safe handling: Use personal protection equipment. Avoid breathing vapors or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

General hygiene considerations: Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing.

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

Storage Conditions: Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations.

### 7.3. Specific end use(s)

Other information: No information available.

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008



Revision date: 25-Aug-2021

Kluthe KS 2 RAL 9005 - 021210339005

Revision Number: 1

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Exposure Limits:

Chemical name	European Union	Germany	Netherlands	Spain	United Kingdom	Hungary
n-Butyl acetate 123-86-4		TWA: 62 ppm TWA: 300 mg/m <sup>3</sup>		TWA: 150 ppm TWA: 724 mg/m <sup>3</sup> STEL: 200 ppm STEL: 965 mg/m <sup>3</sup>	TWA: 150 ppm TWA: 724 mg/m <sup>3</sup> STEL: 200 ppm STEL: 966 mg/m <sup>3</sup>	TWA: 950 mg/m <sup>3</sup> STEL: 950 mg/m <sup>3</sup>
hydrocarbons, C9, aromats -		RCP: C9-14 aromates: STEL: 50 mg/m <sup>3</sup> - 2(II)				
Quartz 14808-60-7	TWA: 0.1 mg/m <sup>3</sup>		TWA: 0.075 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>	TWA: 0.15 mg/m <sup>3</sup>
Methyl methacrylate 80-62-6	TWA: 50 ppm STEL: 100 ppm	TWA: 50 ppm TWA: 210 mg/m <sup>3</sup>	TWA: 205 mg/m <sup>3</sup> STEL: 410 mg/m <sup>3</sup>	TWA: 50 ppm STEL: 100 ppm	TWA: 50 ppm TWA: 208 mg/m <sup>3</sup> STEL: 100 ppm STEL: 416 mg/m <sup>3</sup>	TWA: 208 mg/m <sup>3</sup> STEL: 415 mg/m <sup>3</sup> b*
Maleic anhydride 108-31-6		TWA: 0.02 ppm TWA: 0.081 mg/m <sup>3</sup>		TWA: 0.1 ppm TWA: 0.4 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup> STEL: 3 mg/m <sup>3</sup>	TWA: 0.4 mg/m <sup>3</sup> STEL: 0.4 mg/m <sup>3</sup>

Chemical name	European Union	Germany	Netherlands	Spain	United Kingdom	Hungary
Xylenes (o-, m-, p- isomers) 1330-20-7	TWA: 50 ppm TWA: 221 mg/m <sup>3</sup> STEL: 100 ppm STEL: 442 mg/m <sup>3</sup> *	TWA: 100 ppm TWA: 440 mg/m <sup>3</sup> H*	TWA: 210 mg/m <sup>3</sup> STEL: 442 mg/m <sup>3</sup> H*	TWA: 50 ppm TWA: 221 mg/m <sup>3</sup> STEL: 100 ppm STEL: 442 mg/m <sup>3</sup> via dérmica*	TWA: 50 ppm TWA: 220 mg/m <sup>3</sup> STEL: 100 ppm STEL: 441 mg/m <sup>3</sup> Sk*	TWA: 221 mg/m <sup>3</sup> STEL: 442 mg/m <sup>3</sup> b*
Ethylbenzene 100-41-4	TWA: 100 ppm TWA: 442 mg/m <sup>3</sup> STEL: 200 ppm STEL: 884 mg/m <sup>3</sup> *	TWA: 20 ppm TWA: 88 mg/m <sup>3</sup> H*	TWA: 215 mg/m <sup>3</sup> STEL: 430 mg/m <sup>3</sup> H*	TWA: 100 ppm TWA: 441 mg/m <sup>3</sup> STEL: 200 ppm STEL: 884 mg/m <sup>3</sup> via dérmica*	TWA: 100 ppm TWA: 441 mg/m <sup>3</sup> STEL: 125 ppm STEL: 552 mg/m <sup>3</sup> Sk*	TWA: 442 mg/m <sup>3</sup> STEL: 884 mg/m <sup>3</sup> b*

Chemical name	France	Italy	Portugal	Finland	Denmark	Czech Republic
n-Butyl acetate 123-86-4	TWA: 150 ppm TWA: 710 mg/m <sup>3</sup> STEL: 200 ppm STEL: 940 mg/m <sup>3</sup>		TWA: 150 ppm STEL: 200 ppm	TWA: 150 ppm TWA: 720 mg/m <sup>3</sup> STEL: 200 ppm STEL: 960 mg/m <sup>3</sup>	TWA: 150 ppm TWA: 710 mg/m <sup>3</sup>	TWA: 950 mg/m <sup>3</sup> Ceiling: 1200 mg/m <sup>3</sup>
Quartz 14808-60-7	TWA: 0.1 mg/m <sup>3</sup>		TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>	TWA: 0.3 mg/m <sup>3</sup> TWA: 0.1 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>
Methyl methacrylate 80-62-6	TWA: 50 ppm TWA: 205 mg/m <sup>3</sup> STEL: 100 ppm STEL: 410 mg/m <sup>3</sup>	TWA: 50 ppm STEL: 100 ppm	TWA: 50 ppm STEL: 100 ppm	TWA: 10 ppm TWA: 42 mg/m <sup>3</sup> STEL: 50 ppm STEL: 210 mg/m <sup>3</sup>	TWA: 25 ppm TWA: 102 mg/m <sup>3</sup> H*	TWA: 50 mg/m <sup>3</sup> Ceiling: 150 mg/m <sup>3</sup> D*
Maleic anhydride 108-31-6	STEL: 1 mg/m <sup>3</sup>		TWA: 0.01 mg/m <sup>3</sup>	TWA: 0.1 ppm TWA: 0.41 mg/m <sup>3</sup> Ceiling: 0.2 ppm Ceiling: 0.81 mg/m <sup>3</sup>	TWA: 0.1 ppm TWA: 0.4 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup> Ceiling: 2 mg/m <sup>3</sup>

Chemical name	France	Italy	Portugal	Finland	Denmark	Czech Republic
Xylenes (o-, m-, p- isomers) 1330-20-7	TWA: 50 ppm TWA: 221 mg/m <sup>3</sup> STEL: 100 ppm	TWA: 50 ppm TWA: 221 mg/m <sup>3</sup> STEL: 100 ppm	TWA: 50 ppm TWA: 221 mg/m <sup>3</sup> STEL: 100 ppm	TWA: 50 ppm TWA: 220 mg/m <sup>3</sup> STEL: 100 ppm	TWA: 25 ppm TWA: 109 mg/m <sup>3</sup> H*	

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008



Revision date: 25-Aug-2021

Revision Number: 1

Kluthe KS 2 RAL 9005 - 021210339005

Chemical name	France	Italy	Portugal	Finland	Denmark	Czech Republic
	STEL: 442 mg/m <sup>3</sup> *	STEL: 442 mg/m <sup>3</sup> pelle*	STEL: 442 mg/m <sup>3</sup> P*	STEL: 440 mg/m <sup>3</sup> iho*		
Ethylbenzene 100-41-4	TWA: 20 ppm TWA: 88.4 mg/m <sup>3</sup> STEL: 100 ppm STEL: 442 mg/m <sup>3</sup> *	TWA: 100 ppm TWA: 442 mg/m <sup>3</sup> STEL: 200 ppm STEL: 884 mg/m <sup>3</sup> pelle*	TWA: 100 ppm TWA: 442 mg/m <sup>3</sup> STEL: 200 ppm STEL: 884 mg/m <sup>3</sup> P*	TWA: 50 ppm TWA: 220 mg/m <sup>3</sup> STEL: 200 ppm STEL: 880 mg/m <sup>3</sup> iho*	TWA: 50 ppm TWA: 217 mg/m <sup>3</sup> H*	

Chemical name	Austria	Switzerland	Poland	Norway	Ireland	Russia
n-Butyl acetate 123-86-4	TWA: 100 ppm TWA: 480 mg/m <sup>3</sup> STEL 100 ppm STEL 480 mg/m <sup>3</sup> Ceiling 100 ppm Ceiling 480 mg/m <sup>3</sup>	TWA: 100 ppm TWA: 480 mg/m <sup>3</sup> STEL: 200 ppm STEL: 960 mg/m <sup>3</sup>	STEL: 720 mg/m <sup>3</sup> TWA: 240 mg/m <sup>3</sup>	TWA: 75 ppm TWA: 355 mg/m <sup>3</sup> STEL: 112.5 ppm STEL: 443.75 mg/m <sup>3</sup>	TWA: 150 ppm TWA: 710 mg/m <sup>3</sup> STEL: 200 ppm STEL: 950 mg/m <sup>3</sup>	TWA: 50 mg/m <sup>3</sup> STEL: 200 mg/m <sup>3</sup>
Quartz 14808-60-7	TWA: 0.15 mg/m <sup>3</sup>	TWA: 0.15 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>	TWA: 0.3 mg/m <sup>3</sup> TWA: 0.1 mg/m <sup>3</sup> STEL: 0.9 mg/m <sup>3</sup> STEL: 0.3 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup> STEL: 3 mg/m <sup>3</sup>
Methyl methacrylate 80-62-6	TWA: 50 ppm TWA: 210 mg/m <sup>3</sup> STEL 100 ppm STEL 420 mg/m <sup>3</sup>	TWA: 50 ppm TWA: 210 mg/m <sup>3</sup> STEL: 100 ppm STEL: 420 mg/m <sup>3</sup>	STEL: 300 mg/m <sup>3</sup> TWA: 100 mg/m <sup>3</sup>	TWA: 25 ppm TWA: 100 mg/m <sup>3</sup> STEL: 100 ppm STEL: 400 mg/m <sup>3</sup>	TWA: 50 ppm STEL: 100 ppm	TWA: 10 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>
Maleic anhydride 108-31-6	TWA: 0.1 ppm TWA: 0.4 mg/m <sup>3</sup> STEL 0.2 ppm STEL 0.8 mg/m <sup>3</sup>	TWA: 0.1 ppm TWA: 0.4 mg/m <sup>3</sup> STEL: 0.1 ppm STEL: 0.4 mg/m <sup>3</sup>	STEL: 1 mg/m <sup>3</sup> TWA: 0.5 mg/m <sup>3</sup>	TWA: 0.2 ppm TWA: 0.8 mg/m <sup>3</sup> STEL: 0.6 ppm STEL: 2.4 mg/m <sup>3</sup>	TWA: 0.01 ppm STEL: 0.03 ppm	MAC: 1 mg/m <sup>3</sup> Skin

Chemical name	Austria	Switzerland	Poland	Norway	Ireland	Russia
Xylenes (o-, m-, p- isomers) 1330-20-7	TWA: 50 ppm TWA: 221 mg/m <sup>3</sup> STEL 100 ppm STEL 442 mg/m <sup>3</sup>	TWA: 100 ppm TWA: 435 mg/m <sup>3</sup> STEL: 200 ppm STEL: 870 mg/m <sup>3</sup> H*	STEL: 200 mg/m <sup>3</sup> TWA: 100 mg/m <sup>3</sup>	TWA: 25 ppm TWA: 108 mg/m <sup>3</sup> STEL: 37.5 ppm STEL: 135 mg/m <sup>3</sup> H*	TWA: 50 ppm TWA: 221 mg/m <sup>3</sup> STEL: 100 ppm STEL: 442 mg/m <sup>3</sup> Sk*	TWA: 50 mg/m <sup>3</sup> STEL: 150 mg/m <sup>3</sup>
Ethylbenzene 100-41-4	TWA: 100 ppm TWA: 440 mg/m <sup>3</sup> STEL 200 ppm STEL 880 mg/m <sup>3</sup> H*	TWA: 50 ppm TWA: 220 mg/m <sup>3</sup> STEL: 50 ppm STEL: 220 mg/m <sup>3</sup> H*	STEL: 400 mg/m <sup>3</sup> TWA: 200 mg/m <sup>3</sup>	TWA: 5 ppm TWA: 20 mg/m <sup>3</sup> STEL: 10 ppm STEL: 30 mg/m <sup>3</sup> H*	TWA: 100 ppm TWA: 442 mg/m <sup>3</sup> STEL: 200 ppm STEL: 884 mg/m <sup>3</sup> Sk*	TWA: 50 mg/m <sup>3</sup> STEL: 150 mg/m <sup>3</sup>

Biological occupational exposure limits:

Chemical name	European Union	Germany	Netherlands	Spain	United Kingdom	Hungary
Xylenes (o-, m-, p- isomers) 1330-20-7		2000 mg/L - urine (Methylhippuric(tol ur-)acid (all isomers)) - end of shift		1 g/g Creatinine - urine (Methylhippuric acids) - end of shift	650 mmol/mol creatinine - urine (Methyl hippuric acid) - post shift	
Ethylbenzene 100-41-4		250 mg/g Creatinine - urine (Mandelic acid plus Phenylglyoxylic acid) - end of shift		700 mg/g Creatinine - urine (Mandelic acid plus Phenylglyoxylic acid) - end of workweek		

Chemical name	France	Italy	Portugal	Finland	Denmark	Czech Republic
---------------	--------	-------	----------	---------	---------	----------------



# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008



Revision date: 25-Aug-2021

Revision Number: 1

Kluthe KS 2 RAL 9005 - 021210339005

Chemical name	France	Italy	Portugal	Finland	Denmark	Czech Republic
Xylenes (o-, m-, p-isomers) 1330-20-7	1500 mg/g creatinine - urine (Methylhippuric acid) - end of shift			5.0 mmol/L - urine (Methylhippuric acid) - after the shift		
Ethylbenzene 100-41-4	1500 mg/g creatinine - urine (Mandelic acid) - end of shift at end of workweek			5.2 mmol/L - urine (Mandelic acid) - after the shift after a working week or exposure period		

Chemical name	Austria	Switzerland	Poland	Norway	Ireland	Russia
Xylenes (o-, m-, p-isomers) 1330-20-7	1.5 g/L - urine (Methylhippuric acid) - after end of work day, at the end of a work week/end of the shift	2 g/L - urine (Methylhippuric acid) - end of shift			1.5 g/g Creatinine - urine (Methylhippuric acids) - end of shift	
Ethylbenzene 100-41-4		600 mg/g creatinine - urine (Mandelic acid and Phenylglyoxylacid) - end of shift			0.7 g/g Creatinine - urine (sum of Mandelic acid and Phenylglyoxylic acid) - end of shift at end of workweek 0.7 g - end-exhaled air () - not critical	

Derived No Effect Level (DNEL):

component information:

Worker - inhalative:

Chemical name	long term, systemic	short term, systemic	long term, local	short term, local
n-Butyl acetate	300 mg/m <sup>3</sup>			600 mg/m <sup>3</sup>
xylene (reaction product of xylene and ethylbenzene)	221 mg/m <sup>3</sup>	442 mg/m <sup>3</sup>	221 mg/m <sup>3</sup>	442 mg/m <sup>3</sup>
hydrocarbons, C9, aromats	150 mg/m <sup>3</sup>			
Bisphenol A diglycidyl ether	12.25 mg/m <sup>3</sup>	12.25 mg/m <sup>3</sup>		
Maleic anhydride	190 µg/cm <sup>2</sup>	800 µg/cm <sup>2</sup>	320 µg/cm <sup>2</sup>	800 µg/cm <sup>2</sup>

Chemical name	short term, local	short term, systemic	long term, local	long term, systemic
Xylenes (o-, m-, p- isomers)	442 mg/m <sup>3</sup>	442 mg/m <sup>3</sup>	221 mg/m <sup>3</sup>	221 mg/m <sup>3</sup>
Ethylbenzene	293 mg/m <sup>3</sup>			77 mg/m <sup>3</sup>

Worker - dermal:

Chemical name	long term, systemic	short term, systemic	long term, local	short term, local
n-Butyl acetate	11 mg/kg			
xylene (reaction product of xylene and ethylbenzene)	212 mg/kg bw/day			
hydrocarbons, C9, aromats	25 mg/kg bw/day			
Bisphenol A diglycidyl ether	8.33 mg/kg bw/day	8.33 mg/kg bw/day		

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008



Revision date: 25-Aug-2021

Kluthe KS 2 RAL 9005 - 021210339005

Revision Number: 1

Chemical name	long term, systemic	short term, systemic	long term, local	short term, local
Fatty acids, C14-18 and C16-18-unsaturated, maleated	3.33 mg/kg bw/day			

Chemical name	short term, local	short term, systemic	long term, local	long term, systemic
Ethylbenzene				180 mg/kg bw/day

Consumer - inhalative:

Chemical name	long term, systemic	short term, systemic	long term, local	short term, local
n-Butyl acetate	35.7 mg/m <sup>3</sup>			300 mg/m <sup>3</sup>
xylene (reaction product of xylene and ethylbenzene)	65.3 mg/m <sup>3</sup>	260 mg/m <sup>3</sup>	65.3 mg/m <sup>3</sup>	260 mg/m <sup>3</sup>
hydrocarbons, C9, aromats	32 mg/m <sup>3</sup>			
Maleic anhydride	0.05 mg/m <sup>3</sup>		0.08 mg/m <sup>3</sup>	

Chemical name	short term, local	short term, systemic	long term, local	long term, systemic
Xylenes (o-, m-, p- isomers)	260 mg/m <sup>3</sup>	260 mg/m <sup>3</sup>	65.3 mg/m <sup>3</sup>	65.3 mg/m <sup>3</sup>
Ethylbenzene				15 mg/m <sup>3</sup>

Consumer - dermal:

Chemical name	long term, systemic	short term, systemic	long term, local	short term, local
n-Butyl acetate	6 mg/kg bw/day			
xylene (reaction product of xylene and ethylbenzene)	125 mg/kg bw/day			
hydrocarbons, C9, aromats	11 mg/kg bw/day			
Bisphenol A diglycidyl ether	3.571 mg/kg bw/day	3.571 mg/kg bw/day		
Fatty acids, C14-18 and C16-18-unsaturated, maleated	1.67 mg/kg bw/day			
Maleic anhydride	0.1 mg/kg bw/day	0.1 mg/kg bw/day		

Chemical name	short term, local	short term, systemic	long term, local	long term, systemic
Xylenes (o-, m-, p- isomers)				125 mg/kg bw/day

consumer - oral:

Chemical name	long term, systemic	short term, systemic	long term, local	short term, local
n-Butyl acetate	2 mg/kg bw/day			
xylene (reaction product of xylene and ethylbenzene)	12.5 mg/kg bw/day			
hydrocarbons, C9, aromats	11 mg/kg bw/day			
Bisphenol A diglycidyl ether	0.75 mg/kg bw/day	0.75 mg/kg bw/day		
Fatty acids, C14-18 and C16-18-unsaturated, maleated	1.67 mg/kg bw/day			
Maleic anhydride	0.06 mg/kg bw/day	0.1 mg/kg bw/day		

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008



Revision date: 25-Aug-2021

Klutho KS 2 RAL 9005 - 021210339005

Revision Number: 1

Chemical name	short term, local	short term, systemic	long term, local	long term, systemic
Xylenes (o-, m-, p- isomers)				12.5 mg/kg bw/day
Ethylbenzene				1.6 mg/kg bw/day

Predicted No Effect Concentration (PNEC):

component information:

Chemical name	n-Butyl acetate
Freshwater	0.18 mg/L
Marine water	0.018 mg/L
Intermittent release	0.36 mg/L
Impact on Sewage Treatment	35.6 mg/L
Freshwater sediment	0.981 mg/kg
Marine sediment	0.098 mg/kg
Soil	0.0903 mg/kg

Chemical name	xylene (reaction product of xylene and ethylbenzene)
Freshwater	0.327 mg/L
Marine water	0.327 mg/L
Intermittent release	0.327 mg/L
Impact on Sewage Treatment	6.58 mg/L
Freshwater sediment	12.46 mg/kg
Marine sediment	12.46 mg/kg
Soil	2.31 mg/kg

Chemical name	Bisphenol A diglycidyl ether
Freshwater	6 µg/L
Marine water	0.6 µg/L
Intermittent release	18 µg/L
Impact on Sewage Treatment	10 mg/L
Freshwater sediment	0.996 mg/kg
Marine sediment	0.0996 mg/kg
Soil	0.196 mg/kg

Chemical name	Maleic anhydride
Freshwater	75-100 µg/L
Marine water	428.1-750 µg/L
Freshwater sediment	0.06-0.334 mg/kg dry weight
Marine sediment	0.006-0.0334 mg/kg dry weight
Soil	0.001-0.00415 mg/kg dry weight

Chemical name	Xylenes (o-, m-, p- isomers)
Marine water	0.327 mg/L
Intermittent release	0.327 mg/L
Impact on Sewage Treatment	6.58 mg/L
Freshwater sediment	12.46 mg/kg
Marine sediment	12.46 mg/kg
Soil	2.31 mg/kg

Chemical name	Ethylbenzene
Freshwater	0.1 mg/L
Marine water	0.01 - 0.1 mg/L

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008



Revision date: 25-Aug-2021

Kluthe KS 2 RAL 9005 - 021210339005

Revision Number: 1

Intermittent release	0.1 mg/L
Impact on Sewage Treatment	9.6 mg/L
Freshwater sediment	13.7 mg/kg
Marine sediment	1.37 mg/kg
Soil	2.68 mg/kg dry weight
Food chain	20 mg/kg dry weight

## 8.2. Exposure controls

Engineering controls: None under normal use conditions.

Personal protective equipment:



Eye/face protection: Tight sealing safety goggles.

Hand protection: Wear suitable gloves. Impervious gloves.

PPE - Glove material	Glove thickness	Break through time
NBR (Nitrile rubber)	0.4 mm	>=480 min.

Skin and body protection: Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots.

Respiratory protection: No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Recommended Filter Type: Filtering device (full mask or mouthpiec AP-2

Environmental exposure controls: No information available.

## SECTION 9: Physical and chemical properties

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

Appearance Liquid

Color black

Odor characteristic

	Conditions	Method	Remarks
Melting point / melting range			Not established

Boiling point / boiling range	>	100	°C
-------------------------------	---	-----	----

Flammability			Not established
--------------	--	--	-----------------

Decomposition temperature			not relevant
---------------------------	--	--	--------------

Flash point	>	23	°C
-------------	---	----	----

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008



Revision date: 25-Aug-2021

Klutho KS 2 RAL 9005 - 021210339005

Revision Number: 1

<b>Autoignition temperature</b>					None known
<b>Lower explosive limit</b>					not relevant
<b>Upper explosion limit</b>					not relevant
<b>Vapor pressure</b>	>	1100	hPa	50 °C	
<b>Density</b>	~	1.270	g/cm <sup>3</sup>	20 °C	
<b>Water solubility</b>					Immiscible
<b>pH</b>					Not applicable
<b>pH (as aqueous solution)</b>					Not established
<b>Partition coefficient</b>					Not established
<b>Kinematic viscosity</b>	>	21	mm <sup>2</sup> /s	40 °C	
<b>Odor threshold</b>					Not established
<b>Relative density</b>					Not established
<b>Evaporation rate</b>					Not established
<b>Relative vapor density</b>		no data available			
<b>Particle Size</b>		no data available			
<b>Particle Size Distribution</b>		no data available			

## 9.2. Other information

<b>Bulk density:</b>	no data available
<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available

### 9.2.1. Information with regard to physical hazard classes:

Explosive properties	Not an explosive
Oxidizing properties	Not oxidising.

### 9.2.2. Other safety characteristics: No information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reactivity: No information available.

### 10.2. Chemical stability

Stability: Stable under normal conditions.

Explosion data:

Sensitivity to mechanical impact: None.

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008



Revision date: 25-Aug-2021

Kluthé KS 2 RAL 9005 - 021210339005

Revision Number: 1

Sensitivity to static discharge: Yes.

## 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions: None under normal processing.

## 10.4. Conditions to avoid

Conditions to avoid: Heat, flames and sparks.

## 10.5. Incompatible materials

Incompatible materials: Strong acids. Strong bases. Strong oxidizing agents.

## 10.6. Hazardous decomposition products

Hazardous decomposition products: None known based on information supplied.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Information on likely routes of exposure:

Product Information:

Inhalation: Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract. May cause drowsiness or dizziness.

Eye contact: Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.

Skin contact: May cause sensitization by skin contact. Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). Causes skin irritation.

Ingestion: Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Symptoms related to the physical, chemical and toxicological characteristics:

Symptoms: Itching. Rashes. Hives. Redness. May cause redness and tearing of the eyes. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Numerical measures of toxicity:

Acute toxicity: The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (dermal):	8,923.20 mg/kg
ATEmix (inhalation-dust/mist):	13.40 mg/l
ATEmix (inhalation-vapor):	57.70 mg/l

Component Information:

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008



Revision date: 25-Aug-2021

Kluthe KS 2 RAL 9005 - 021210339005

Revision Number: 1

Chemical name	Parameter	Species	effektive Dosis	Method
n-Butyl acetate 123-86-4	Oral LD50	Rat	10768 mg/kg	OECD 423
xylene (reaction product of xylene and ethylbenzene) -	Oral LD50	Rat	3523 mg/kg	EG92/69/EWG B.1
hydrocarbons, C9, aromats -	Oral LD50	Rat	3592 mg/kg	OECD 401
Bisphenol A diglycidyl ether 1675-54-3	Oral LD50	Rat	> 2000 mg/kg	OECD 420
Methyl methacrylate 80-62-6	Oral LD50	Rat	8420 - 10000 mg/kg	
Maleic anhydride 108-31-6	Oral LD50	Rat	1090 mg/kg	OECD 401

Chemical name	Parameter	Species	effektive Dosis	Method
Xylenes (o-, m-, p- isomers) 1330-20-7	Oral LD50	Rat	3500 mg/kg	
Ethylbenzene 100-41-4	Oral LD50	Rat	3500 mg/kg	

Chemical name	Parameters	Species	Effective dose	Method
n-Butyl acetate 123-86-4	Dermal LD50	Rabbit	> 5000 mg/kg	OECD 402
xylene (reaction product of xylene and ethylbenzene) -	Dermal LD50	Rabbit	12126 mg/kg	
hydrocarbons, C9, aromats -	Dermal LD50	Rabbit	> 3160 mg/kg	OECD 402
Bisphenol A diglycidyl ether 1675-54-3	Dermal LD50	Rat	> 2000 mg/kg	OECD 402
Methyl methacrylate 80-62-6	Dermal LD50	Rabbit	5000 - 7500 mg/kg	
Maleic anhydride 108-31-6	Dermal LD50	Rabbit	2620 mg/kg	

Chemical name	Parameters	Species	Effective dose	Method
Xylenes (o-, m-, p- isomers) 1330-20-7	Dermal LD50	Rabbit	> 4350 mg/kg	
Ethylbenzene 100-41-4	Dermal LD50	Rabbit	15400 mg/kg	

Chemical name	Parameters	Species	Effective dose	Exposure time	Method
n-Butyl acetate 123-86-4	Inhalation LC50	Rat	23.4 mg/m <sup>3</sup>	4 h	OECD 403
xylene (reaction product of xylene and ethylbenzene) -	Inhalation LC50	Rat	27124 mg/m <sup>3</sup>	4 h	
Methyl methacrylate 80-62-6	Inhalation LC50	Rat	7093 ppm	4 h	
Maleic anhydride 108-31-6	Inhalation LC50	Rat	4.35 mg/m <sup>3</sup>	4 h	

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008



Revision date: 25-Aug-2021

Kluthe KS 2 RAL 9005 - 021210339005

Revision Number: 1

Chemical name	Parameters	Species	Effective dose	Exposure time	Method
Xylenes (o-, m-, p- isomers) 1330-20-7	Inhalation LC50	Rat	29.08 mg/L	4 h	
Ethylbenzene 100-41-4	Inhalation LC50	Rat	17.4 mg/L	4 h	

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Skin corrosion/irritation:	Irritating to skin.
Serious eye damage/eye irritation:	Causes serious eye irritation.
Respiratory or skin sensitization:	May cause sensitization by skin contact.
Germ cell mutagenicity:	No information available.
Carcinogenicity:	No information available.
Reproductive toxicity:	No information available.
STOT - single exposure:	May cause drowsiness or dizziness.
STOT - repeated exposure:	May cause damage to organs through prolonged or repeated exposure.

Chemical name	Exposure route	Target Organs
xylene (reaction product of xylene and ethylbenzene) -	Inhalation	auditory organs
Maleic anhydride 108-31-6	Inhalation	lung

Aspiration hazard: No information available.

## 11.2. Information on other hazards

### 11.2.1. Endocrine disrupting properties

### 11.2.2. Other information

No information available.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecotoxicity: Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

fish toxicity:

Chemical name	Parameter	Species	Effective dose	Exposure time	Method
n-Butyl acetate 123-86-4	LC50	Pimephales promelas	17 - 19 mg/L	96 h	OECD 203



# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008



Revision date: 25-Aug-2021

Kluthe KS 2 RAL 9005 - 021210339005

Revision Number: 1

Chemical name	Parameter	Species	Effective dose	Exposure time	Method
xylene (reaction product of xylene and ethylbenzene) -	LC50	Oncorhynchus mykiss	2.6 mg/L	96 h	OECD 203
hydrocarbons, C9, aromats -	LC50	Oncorhynchus mykiss	9.22 mg/L	96 h	
Bisphenol A diglycidyl ether 1675-54-3	LC50	Oncorhynchus mykiss	1.5 mg/L	96 h	OECD 203
Fatty acids, C14-18 and C16-18-unsaturated, maleated 85711-46-2	LC50	Danio rerio	> 100 mg/L	96 h	
Methyl methacrylate 80-62-6	LC50	Pimephales promelas Lepomis macrochirus Oncorhynchus mykiss Poecilia reticulata	243 - 275 mg/L 125.5 - 190.7 mg/L 170 - 206 mg/L 153.9 - 341.8 mg/L	96 h	
Maleic anhydride 108-31-6	LC50	Oncorhynchus mykiss	75 mg/L	96 h	

Chemical name	Parameter	Species	Effective dose	Exposure time	Method
Xylenes (o-, m-, p- isomers) 1330-20-7	LC50	Pimephales promelas	13.4 mg/L	96 h	
Ethylbenzene 100-41-4	LC50	Oncorhynchus mykiss	4.2 mg/L	96 h	

toxicity to crustacea:

Chemical name	Parameter	Species	Effective dose	Exposure time	Method
n-Butyl acetate 123-86-4	EC50	Daphnia magna	44 mg/L	48 h	OECD 202
xylene (reaction product of xylene and ethylbenzene) -	LC 50	Daphnia magna	1.0 mg/L	24 h	OECD 202
hydrocarbons, C9, aromats -	EC50	Daphnia magna	6.14 mg/L	48 h	
Bisphenol A diglycidyl ether 1675-54-3	EC50	Daphnia magna	2.7 mg/L	48 h	
Methyl methacrylate 80-62-6	EC50	Daphnia magna	69 mg/L	48 h	
Maleic anhydride 108-31-6	EC50	Daphnia magna	42.81 mg/L	48 h	OECD 202

Chemical name	Parameter	Species	Effective dose	Exposure time	Method
Xylenes (o-, m-, p- isomers) 1330-20-7	EC50	Daphnia magna	3.82 mg/L	48 h	
Ethylbenzene 100-41-4	EC50	Daphnia magna	1.8 - 2.4 mg/L	48 h	

Algae Toxicity:

Chemical name	Parameter	Species	Effective dose	Exposure time	Method
n-Butyl acetate	EC50	Desmodesmus	674.7 mg/L	72 h	

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008



Revision date: 25-Aug-2021

Revision Number: 1

Kluthe KS 2 RAL 9005 - 021210339005

Chemical name	Parameter	Species	Effective dose	Exposure time	Method
123-86-4		subspicatus			
xylene (reaction product of xylene and ethylbenzene)	EC50	Selenastrum capricornutum	2.2 mg/L	73 h	OECD 201
-					
hydrocarbons, C9, aromats	EL50	Pseudokirchneriella subcapitata	2.6 - 2.9 mg/L	72 h	
-					
Bisphenol A diglycidyl ether 1675-54-3	EC50	Selenastrum capricornutum	9.4 mg/L	72 h	
Methyl methacrylate 80-62-6	EC50	Pseudokirchneriella subcapitata	170 mg/L	96 h	
Maleic anhydride 108-31-6	EC50	Pseudokirchneriella subcapitata	74.35 mg/L	72 h	OECD 201

Chemical name	Parameter	Species	Effective dose	Exposure time	Method
Ethylbenzene 100-41-4	EC50	Pseudokirchneriella subcapitata	4.6 mg/L	72 h	

Bacteria toxicity:

Chemical name	Parameters	Species	Effective dose	Exposure time	Method
xylene (reaction product of xylene and ethylbenzene)	NOEC	activated sludge	16 mg/L	28 d	OECD 301 F
-					

## 12.2. Persistence and degradability

Persistence and degradability:

Chemical name	degradation rate	test duration	Rapidly biodegradable	Remarks	Method
n-Butyl acetate 123-86-4	23 %	28 d	Yes		
xylene (reaction product of xylene and ethylbenzene)	90 %	28 d	Yes		
-					
hydrocarbons, C9, aromats			Yes		
-					
Maleic anhydride 108-31-6			Yes		

Chemical name	degradation rate	test duration	Rapidly biodegradable
Xylenes (o-, m-, p- isomers) 1330-20-7			Yes
Ethylbenzene 100-41-4	70 - 80 %	28 d	Yes

## 12.3. Bioaccumulative potential

Bioaccumulation:

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008



Revision date: 25-Aug-2021

Kluthe KS 2 RAL 9005 - 021210339005

Revision Number: 1

Chemical name	Partition coefficient	Bioconcentration factor (BCF)
n-Butyl acetate 123-86-4	1.81	15
xylene (reaction product of xylene and ethylbenzene) -	3.16	25.9
Methyl methacrylate 80-62-6	0.7	

Chemical name	Partition coefficient	Bioconcentration factor (BCF)
Xylenes (o-, m-, p- isomers) 1330-20-7	2.77 - 3.15	0.6 - 15
Ethylbenzene 100-41-4	3.2	15

## 12.4. Mobility in soil

Mobility in soil: No information available.

Mobility: No information available.

## 12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment:

Chemical name	PBT and vPvB assessment
n-Butyl acetate 123-86-4	The substance is not PBT / vPvB
hydrocarbons, C9, aromats -	The substance is not PBT / vPvB
Bisphenol A diglycidyl ether 1675-54-3	The substance is not PBT / vPvB
Fatty acids, C14-18 and C16-18-unsaturated, maleated 85711-46-2	The substance is not PBT / vPvB
Methyl methacrylate 80-62-6	The substance is not PBT / vPvB PBT assessment does not apply
Maleic anhydride 108-31-6	The substance is not PBT / vPvB PBT assessment does not apply

Chemical name	PBT and vPvB assessment
Xylenes (o-, m-, p- isomers) 1330-20-7	The substance is not PBT / vPvB
Ethylbenzene 100-41-4	The substance is not PBT / vPvB

## 12.6. Endocrine disrupting properties.

No information available.

Chemical name	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disrupters - Evaluated Substances
Bisphenol A diglycidyl ether 1675-54-3	Group II Chemical	-

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008



Revision date: 25-Aug-2021

Klutho KS 2 RAL 9005 - 021210339005

Revision Number: 1

## 12.7. Other adverse effects.

No information available.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste from residues/unused products: Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging: Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

Waste codes / waste designations according to EWC / AVV: 08 01 11\* (Waste paint and varnish containing organic solvents or other dangerous substances)

## SECTION 14: Transport information

### 14.1. UN number

ADR:	UN1263
RID:	UN1263
IMDG:	UN1263
IATA:	UN1263

### 14.2 UN proper shipping name

ADR:	PAINT
UN1263, PAINT, 3, III	

RID:	PAINT
UN1263, PAINT, 3, III	

IMDG:	PAINT
UN1263, PAINT, 3, III, (23°C C.C.)	

IATA:	PAINT
UN1263, PAINT, 3, III	

### 14.3. Transport hazard class(es)

ADR:	3
Hazard label(s)	3
Classification code	F1
Hazard identification number (Kemler No.)	30
Tunnel restriction code	(D/E)
Limited quantity (LQ)	5 L
ADR excepted quantity	E1

RID:	3
Labels	3
Classification code	F1

IMDG:	3
-------	---

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008



Revision date: 25-Aug-2021

Kluthe KS 2 RAL 9005 - 021210339005

Revision Number: 1

Hazard label(s) 3  
Limited quantity (LQ) 5 L  
IMDG Excepted Quantity E1  
EmS-No F-E, S-E

IATA: 3  
Hazard label(s) 3  
IATA Excepted Quantity E1

## 14.4. Packing group

ADR: III  
RID: III  
IMDG: III  
IATA: III

## 14.5. Environmental hazards

ADR: Not regulated  
RID: Not regulated  
IMDG: no marine pollutant  
IATA: Not regulated

## 14.6. Special precautions for user

ADR:  
Special Provisions: 163, 650, 367  
Note: 2.2.3.1.5.1: n. a. < 450 L  
RID:  
Special Provisions: 163, 650, 367  
IMDG:  
Special Provisions: 163, 223, 367, 955  
IATA:  
Special Provisions: A3, A72, A192  
ERG Code 3L

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

No information available

## SECTION 15: Regulatory information

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

#### European Union:

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Authorizations and/or restrictions on use:

- This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Substance subject to authorization	Restricted substance per REACH
---------------	------------------------------------	--------------------------------

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008



Revision date: 25-Aug-2021

Kluthe KS 2 RAL 9005 - 021210339005

Revision Number: 1

	per REACH Annex XIV	Annex XVII
hydrocarbons, C9, aromats -		3. 28. 29. 40.
Bisphenol A diglycidyl ether 1675-54-3		75.
Methyl methacrylate 80-62-6		75.
Maleic anhydride 108-31-6		75.

Chemical name	Substance subject to authorization per REACH Annex XIV	Restricted substance per REACH Annex XVII
Xylenes (o-, m-, p- isomers) 1330-20-7		75.

Persistent Organic Pollutants: Not applicable

Dangerous substance category per Seveso Directive (2012/18/EU):

P5a - FLAMMABLE LIQUIDS

P5b - FLAMMABLE LIQUIDS

P5c - FLAMMABLE LIQUIDS

Ozone-depleting substances (ODS) regulation (EC) 1005/2009: Not applicable

volatile organic compounds (VOC) content:

acc. reg. 2010/75/EG: 35.8 %

acc. reg. 2004/42/EG (Decopaint): 455 g/L

## National regulations:

Denmark:

Chemical name	Denmark - MAL
n-Butyl acetate 123-86-4	14 m3/10 g substance MAL factor >0 % by weight [1]
Bisphenol A diglycidyl ether 1675-54-3	0 m3/10 g substance MAL factor >=1.0 % by weight [5]
Quartz 14808-60-7	0 m3/10 g substance MAL factor 0.1 mg/m <sup>3</sup> Limit Value respirable >=0.1 - 2 % by weight [3] >=1 - 10 % by weight [3] >=10 % by weight [6] >=2 % by weight [6]
Methyl methacrylate 80-62-6	46 m3/10 g substance MAL factor >=1.0 - 5.0 % by weight [3] >=5.0 % by weight [5]
Maleic anhydride 108-31-6	7500 m3/10 g substance MAL factor 0.1 ppm Limit Value >=1 % by weight [5]

Germany:

Water hazard class (WGK): obviously hazardous to water (WGK 2) - Classification according to AwSV

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008



Revision date: 25-Aug-2021

Kluthe KS 2 RAL 9005 - 021210339005

Revision Number: 1

Chemical name	WGK Classification (AwSV)	ID number
n-Butyl acetate 123-86-4	1	42
xylene (reaction product of xylene and ethylbenzene) -	2	206
hydrocarbons, C9, aromats -	2	-
Bisphenol A diglycidyl ether 1675-54-3	1	-
Fatty acids, C14-18 and C16-18-unsaturated, maleated 85711-46-2	1	8839
Quartz 14808-60-7	nwg	849
Methyl methacrylate 80-62-6	1	154
Maleic anhydride 108-31-6	1	261

Chemical name	WGK Classification (AwSV)	ID number
Xylenes (o-, m-, p- isomers) 1330-20-7	2	206
Ethylbenzene 100-41-4	1	99

TA Luft (German Air Pollution Control Regulation):

total dust incl. fine dust (digit 5.2.1): < 5%  
inorg. subst. dust (digit 5.2.2) class III: < 5%  
org. substances (Ziffer 5.2.5): 25 - 30%  
org. subst. (digit 5.2.5) class I: 10 - 15%

Storage class (TRGS 510): 3 • LGK3 - Flammable liquids

France:

Occupational Illnesses (R-463-3, France):

Chemical name	French RG number
n-Butyl acetate 123-86-4	RG 84
hydrocarbons, C9, aromats -	RG 84
Quartz 14808-60-7	RG 25
Methyl methacrylate 80-62-6	RG 65, RG 82
Maleic anhydride 108-31-6	RG 66

Chemical name	French RG number
Xylenes (o-, m-, p- isomers)	RG 4bis, RG 84

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008



Revision date: 25-Aug-2021

Revision Number: 1

Kluthé KS 2 RAL 9005 - 021210339005

<i>Chemical name</i>	<i>French RG number</i>
1330-20-7	
Ethylbenzene 100-41-4	RG 84

RG 4bis - Gastrointestinal conditions caused by benzene, toluene, xylenes, and any products containing them  
RG 25 - Conditions resulting from inhalation of mineral dusts containing crystalline silica (quartz, cristobalite, tridymite), crystalline silicates (kaolin, talc), graphite, or coal.  
RG 65 - Allergic eczema  
RG 66 - Occupational rhinitis and asthma  
RG 82 - Conditions caused by methyl methacrylate  
RG 84 - Occupational conditions caused by liquid organic solvents

Netherlands:

<b>Chemical name</b>	<b>Netherlands - List of Carcinogens</b>	<b>Netherlands - List of Mutagens</b>	<b>Netherlands - List of Reproductive Toxins</b>	<b>ZZS list: SVHC</b>	<b>(p)ZZS list: potential SVHC</b>
Quartz 14808-60-7	Present X				

<i>Chemical name</i>	<i>Netherlands - List of Carcinogens</i>	<i>Netherlands - List of Mutagens</i>	<i>Netherlands - List of Reproductive Toxins</i>	<i>ZZS list: SVHC</i>	<i>(p)ZZS list: potential SVHC</i>
Xylenes (o-, m-, p- isomers) 1330-20-7			Development Category 2		
Ethylbenzene 100-41-4					x

Austria:

Flammable Liquids Regulations, VbF: Flammable liquids: All

Switzerland:

VOC content:: acc. VOCV CH 814.018, att. 1: 35.5 %

## International Inventories:

TSCA	Does not comply
DSL/NDSL	Does not comply
EINECS/ELINCS	Does not comply
ENCS	Does not comply
IECSC	Does not comply
KECL	Does not comply
PICCS	Does not comply
AICS	Does not comply

## Legend:

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances



# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008



Revision date: 25-Aug-2021

Kluthé KS 2 RAL 9005 - 021210339005

Revision Number: 1

**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

## 15.2. Chemical safety assessment

Chemical Safety Report: No information available

## SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet:

Full text of H-Statements referred to under section 3:

EUH066 - Repeated exposure may cause skin dryness or cracking  
EUH071 - Corrosive to the respiratory tract  
H225 - Highly flammable liquid and vapor  
H226 - Flammable liquid and vapor  
H302 - Harmful if swallowed  
H304 - May be fatal if swallowed and enters airways  
H312 - Harmful in contact with skin  
H314 - Causes severe skin burns and eye damage  
H315 - Causes skin irritation  
H317 - May cause an allergic skin reaction  
H318 - Causes serious eye damage  
H319 - Causes serious eye irritation  
H332 - Harmful if inhaled  
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled  
H335 - May cause respiratory irritation  
H336 - May cause drowsiness or dizziness  
H372 - Causes damage to organs through prolonged or repeated exposure  
H373 - May cause damage to organs through prolonged or repeated exposure  
H411 - Toxic to aquatic life with long lasting effects

Legend:

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)  
ADR: European agreement concerning the international carriage of dangerous goods by road  
(Accord européen relatif transport des marchandises dangereuses par route)  
AGW: Occupational threshold limit value (Arbeitsplatzgrenzwert – Germany)  
BCF: Bio-Concentration Factor  
BOD(5): Biochemical oxygen demand (within 5 days)  
CAS: Chemical Abstract Service  
CLP: Classification, Labelling and Packaging  
CMR: Carcinogenic, Mutagenic, toxic for Reproduction  
DIN: German Standards Institute / German industrial norm  
DNEL: Derived No Effect Level  
DOC: Dissolved organic carbon  
EAK/ AVV: European waste catalogue/ waste directory-regulation  
EC50: Effective Concentration 50%  
ECHA: European Chemical Agency  
EINECS: European Inventory of Existing Commercial Chemical Substances  
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals  
IATA: International Air Transport Association  
IC50: Inhibition Concentration 50%

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008



Revision date: 25-Aug-2021

Kluthé KS 2 RAL 9005 - 021210339005

Revision Number: 1

IMDG: International Maritime Dangerous Goods Code  
LC50: Lethal Concentration 50% - LD50: Lethal dose 50%  
MAK: Treshold limit values Germany  
NLP: No Longer Polymers  
NOAEC: No Observed Adverse Effect Concentration  
NOAEL: No Observed Adverse Effect Level  
OECD: Organization for Economic Cooperation and Development  
PBT: persistent, bioaccumulative, toxic  
PC: Product category  
PNEC: Predicted No Effect Concentration  
REACH: Registration, Evaluation and Authorization of Chemicals  
RID: Regulations concerning the international carriage of dangerous goods by rail  
(Règlement International concernant le transport de marchandises dangereuses par chemin de fer)  
STEL: Short-term Exposure Limit  
STP: Sewage treatment plant  
SVHC: Substance of Very High Concern  
TLV: Threshold Limit Value  
TWA: Time Weighted Average  
UN: United Nations  
VOC: Volatile Organic Compounds  
vPvB: very persistent, very bioaccumulative

## Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Ceiling: Maximum limit value

\* Skin designation

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapor	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitization	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

Key literature references and sources for data used to compile the SDS:

European Chemicals Agency (ECHA)

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGl(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008



Revision date: 25-Aug-2021

Kluthe KS 2 RAL 9005 - 021210339005

Revision Number: 1

Japan GHS Classification

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

Revision date: 25-Oct-2021

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006:

## Disclaimer:

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**