

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Urethane

Revision date: 09.12.2019

Product code: 121

Page 1 of 9

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Urethane

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

Reserved for industrial and professional use.

1.3. Details of the supplier of the safety data sheet

Company name: ITW LLC & Co. KG
Street: Mühlackerstrasse 149
Place: D-75417 Mühlacker
Telephone: ++49(0)7041-96340 Telefax: ++49(0)7041-963429
e-mail: info@itwcp.de
Internet: www.itwcp.de
Responsible Department: Produktsicherheit Mo. - Do. 8.00 - 16.30 Fr. 8.00 - 14.00
Swiss Toxicological Information Centre - Téléphone : +41 44 251 51 51 (in Switzerland dial 145)
United Kingdom : National Poisons Information Service - Phone number : 8448920111
Österreich : Vergiftungsinformationszentrale Vienna - Telefon-Nummer : +43 1 406 43 43
Schweiz : Tox Info Suisse - Telefon-Nummer : +41 44 251 51 51
Italia : Centro Antiveneni, Roma - Numero di telefono : +39 06 305 4343
España : Instituto Nacional de Toxicología - Teléfono : +34 91 562 04 20
Deutschland: ++49(0)7041-96340

1.4. Emergency telephone number:**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:

Aerosol: Aerosol 1

Skin corrosion/irritation: Skin Irrit. 2

Specific target organ toxicity - single exposure: STOT SE 3

Specific target organ toxicity - repeated exposure: STOT RE 2

Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements:

Extremely flammable aerosol.

Pressurised container: May burst if heated.

Causes skin irritation.

May cause drowsiness or dizziness.

May cause damage to organs through prolonged or repeated exposure.

Toxic to aquatic life with long lasting effects.

2.2. Label elements**Regulation (EC) No. 1272/2008****Hazard components for labelling**

Kohlenwasserstoffe, C9-C12, n-Alkane, Isoalkane, Cyclene, Aromaten, Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatic

Signal word: Danger

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Urethane

Revision date: 09.12.2019

Product code: 121

Page 2 of 9

Pictograms:



Hazard statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P312	Call a doctor if you feel unwell.
P271	Use only outdoors or in a well-ventilated area.
P251	Do not pierce or burn, even after use.
P211	Do not spray on an open flame or other ignition source.
P210	Keep away from heat. No Smoking.

Special labelling of certain mixtures

EUH208	Contains Butanon-2-oxim = methylethylketonoxim = MEKO (CAS 96-29-7). Long-term exposure to MEKO may damage the mucous membrane of the nose. Long-term high dose inhalation of MEKO may cause irreversible damage to health.. May produce an allergic reaction.
--------	--

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Urethane

Revision date: 09.12.2019

Product code: 121

Page 3 of 9

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
106-97-8	butane			20-40%
	203-448-7	601-004-00-0		
	Flam. Gas 1; H220			
	Hydrocarbons, C6, isoalkanes, <5% n-hexane			10-40%
	931-254-9		01-2119484651-34	
	Flam. Liq. 2; Skin Irrit. 2; STOT SE 3; Asp. Tox. 1; Aquatic Chronic 2; H225 H315 H336 H304 H411			
	Hydrocarbons, C9, aromatics			10-30%
	918-668-5		01-2119455851-35	
	Flam. Liq. 3; STOT SE 3; STOT SE 3; Asp. Tox. 1; Aquatic Chronic 2; H226 H335 H336 H304 H411			
74-98-6	propane			10-30%
	200-827-9	601-003-00-5		
	Flam. Gas 1; H220			
	Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatic			5-10 %
	919-446-0		01-2119458049-33	
	Flam. Liq. 3; STOT SE 3; STOT RE 1; Asp. Tox. 1; Aquatic Acute 1; Aquatic Chronic 2; H226 H336 H372 H304 H400 H411			
96-29-7	2-butanone oxime; ethyl methyl ketoxime; ethyl methyl ketone oxime			<1%
	202-496-6	616-014-00-0		
	Carc. 2; Acute Tox. 4; Eye Dam. 1; Skin Sens. 1; H351 H312 H318 H317			

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Provide fresh air. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After contact with skin

After contact with skin, wash immediately with: Water. Change contaminated clothing.

After contact with eyes

If product gets into the eye, keep eyelid open and rinse immediately with large quantities of water, for at least 5 minutes. Subsequently consult an ophthalmologist.

After ingestion

If swallowed, immediately drink: Water.

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

No data available

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

No data available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Urethane

Revision date: 09.12.2019

Product code: 121

Page 4 of 9

Suitable extinguishing mediaCarbon dioxide (CO₂). Foam. Extinguishing powder.**Unsuitable extinguishing media**

Water with tenside additive. Water.

5.2. Special hazards arising from the substance or mixture

Combustible. Vapours may form explosive mixtures with air. Heating causes rise in pressure with risk of bursting.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Contaminated fire-fighting water must be collected separately. Do not allow to enter into surface water or drains.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Remove all sources of ignition. Provide adequate ventilation. Wear a self-contained breathing apparatus and chemical protective clothing.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Explosion hazard.

6.3. Methods and material for containment and cleaning up

Ventilate affected area.

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from sources of ignition - No smoking.

Hints on joint storage

Do not store together with: Material, rich in oxygen, oxidizing.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
106-97-8	Butane	600	1450		TWA (8 h)	WEL
		750	1810		STEL (15 min)	WEL

8.2. Exposure controls

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Urethane

Revision date: 09.12.2019

Product code: 121

Page 5 of 9



Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Protect skin by using skin protective cream. After work, wash hands and face. When using do not eat or drink.

Eye/face protection

Tightly sealed safety glasses.

Hand protection

DIN EN 374 Tested protective gloves are to be worn: NBR (Nitrile rubber) 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. NBR (Nitrile rubber)

Skin protection

Protective clothing:

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Aerosol
Colour:	colourless
Odour:	characteristic

Changes in the physical state

Initial boiling point and boiling range:	-0,5 °C
Flash point:	<0 °C
Lower explosion limits:	1,2 vol. %
Upper explosion limits:	9,4 vol. %
Ignition temperature:	300 °C
Vapour pressure: (at 20 °C)	2100 hPa
Vapour pressure: (at 50 °C)	4900 hPa
Density (at 20 °C):	0,79 g/cm ³

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

No data available

10.3. Possibility of hazardous reactions

No data available

10.4. Conditions to avoid

Keep away from heat. Ignition hazard.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Urethane

Revision date: 09.12.2019

Product code: 121

Page 6 of 9

10.5. Incompatible materials

No data available

10.6. Hazardous decomposition products

No data available

Further information

No data available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
106-97-8	butane				
	inhalation (4 h) gas	LC50 ppm	273000	Rat	GESTIS
	Hydrocarbons, C6, isoalkanes, <5% n-hexane				
	oral	LD50 mg/kg	>1000	Fisch 1	
96-29-7	2-butanone oxime; ethyl methyl ketoxime; ethyl methyl ketone oxime				
	dermal	ATE mg/kg	1100		

Irritation and corrosivity

Irritating to eyes. Following inhalation: Lung irritation. Coughing. shortage of breath. After skin contact: irritant.

SECTION 12: Ecological information

12.1. Toxicity

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
	Hydrocarbons, C6, isoalkanes, <5% n-hexane					
	Acute algae toxicity	ErC50 mg/l	>1000	72 h	Alge	
	Acute crustacea toxicity	EC50 mg/l	>1000	48 h	Daphnia pulex (water flea)	
96-29-7	2-butanone oxime; ethyl methyl ketoxime; ethyl methyl ketone oxime					
	Acute crustacea toxicity	EC50	750 mg/l	48 h	Daphnia magna	

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
106-97-8	butane	2,89
74-98-6	propane	2,36
96-29-7	2-butanone oxime; ethyl methyl ketoxime; ethyl methyl ketone oxime	0,63

Further information

Do not allow to enter into surface water or drains.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Urethane

Revision date: 09.12.2019

Product code: 121

Page 7 of 9

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

Waste disposal number of waste from residues/unused products

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

Waste disposal number of contaminated packaging

150104 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); metallic packaging

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN1950
14.2. UN proper shipping name: AEROSOLS
14.3. Transport hazard class(es): 2
Hazard label: 2.1



Classification code: 5F
Special Provisions: 190 327 625
Limited quantity: 1 L
Transport category: 2
Tunnel restriction code: D

Other applicable information (land transport)

E0

Inland waterways transport (ADN)

14.1. UN number: UN1950
14.2. UN proper shipping name: AEROSOLS
14.3. Transport hazard class(es): 2
Hazard label: 2.1



Classification code: 5F
Special Provisions: 190 327 344 625
Limited quantity: 1 L

Other applicable information (inland waterways transport)

E0

Marine transport (IMDG)

14.1. UN number: UN1950

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Urethane

Revision date: 09.12.2019

Product code: 121

Page 8 of 9

14.2. UN proper shipping name: AEROSOLS
14.3. Transport hazard class(es): 2
14.4. Packing group: -
 Hazard label: 2, see SP63

Special Provisions: 63, 190, 277, 327, 344, 959
 Limited quantity: See SP277
 EmS: F-D, S-U

Other applicable information (marine transport)

E0

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN1950
14.2. UN proper shipping name: AEROSOLS, flammable
14.3. Transport hazard class(es): 2.1
 Hazard label: 2.1



Special Provisions: A145 A167
 Limited quantity Passenger: 30 kg G
 IATA-packing instructions - Passenger: 203
 IATA-max. quantity - Passenger: 75 kg
 IATA-packing instructions - Cargo: 203
 IATA-max. quantity - Cargo: 150 kg

Other applicable information (air transport)

E0

: Y203

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 28: butane; Hydrocarbons, C6, isoalkanes, <5% n-hexane

2004/42/EC (VOC): 200g/400ml Dose

National regulatory information

Water contaminating class (D): 2 - clearly water contaminating

SECTION 16: Other information

Relevant H and EUH statements (number and full text)

H220 Extremely flammable gas.
 H222 Extremely flammable aerosol.
 H225 Highly flammable liquid and vapour.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Urethane

Revision date: 09.12.2019

Product code: 121

Page 9 of 9

H226	Flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
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.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
EUH208	Contains Butanon-2-oxim = methylethylketonoxim = MEKO (CAS 96-29-7). Long-term exposure to MEKO may damage the mucous membrane of the nose. Long-term high dose inhalation of MEKO may cause irreversible damage to health.. May produce an allergic reaction.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)