

BETOFIX SW UV top component A

Creation date	24. March 2015	Revision no.	1
Date of revision	18. May 2016	Version	2

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

- 1.1. Product identifier
substance / mixture
Number
Other names of the mixture
- BETOFIX SW UV top component A
mixture
2-41
- 1.2. Relevant identified uses of the substance or mixture and uses advised against
Intended use of the mixture
Not recommended use of the mixture
- Two-component protective coating on the basis of epoxy resins
The product should not be used in ways other than those referred in Section 1.
- 1.3. Details of the supplier of the safety data sheet
Manufacturer
Name or trade name
Place of business or residency
Telephone
Fax
E-mail
Web address
Emergency telephone number
Competent person responsible for the safety data sheet
Name
E-mail
- BETOSAN s.r.o.
Na Dolinách 28, Praha 4, 147 00
Czech Republic
241 431 212
241 431 212
praha@betosan.cz
www.betosan.cz
241 431 212, 8,00-16,00
BETOSAN s.r.o.
praha@betosan.cz
- 1.4. Emergency telephone number
Toxicological Information Centre, Na Bojišti 1, Praha, Tel.: non-stop 224 919 293 or 224 915 402, Information on health risks only - acute poisoning of humans and animals

SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture
Classification of the mixture in accordance with Regulation (EC) No 1272/2008
A mixture is classified as dangerous.

Flam. Liq. 3, H226
Skin Irrit. 2, H315
Acute Tox. 4, H332
Aquatic Chronic 2, H411

The classification of the mixture according to Directive 1999/45/EC
The mixture has not been classified.

Full text of all classifications, H-phrases and R-phrases is given in the section 16.

The most serious adverse physicochemical effects

Flammable liquid and vapour.

The most serious adverse effects on human health and the environment

Causes skin irritation. Harmful if inhaled. Toxic to aquatic life with long lasting effects.

- 2.2. Label elements
Warning symbol



Signal word
Warning

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Hazardous substances

xylene
ethylbenzene
1-methoxy-2-propanol
trizinc bis(orthophosphate)

Hazard statements

H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H332 Harmful if inhaled.
H411 Toxic to aquatic life with long lasting effects.

Instructions for safe handling

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P261 Avoid breathing spray
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container to local regulations.

Requirements for child-resistant fastenings and tactile warning of danger

Container has to be fitted with a tactile warning of danger.

2.3. Other hazards
not available

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixture of substances specified below and additives.

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Name of the substance	Content in % weight	Classification according to Directive 67/548/EEC	Classification according to Regulation (EC) No 1272/2008	Note
Index: 601-022-00-9 CAS: 1330-20-7 ES: 215-535-7	xylene	12,5-20	R 10 Xn; R 20/21 Xi; R 38	Flam. Liq. 3, H226 Acute Tox. 4, H312, H332 Skin Irrit. 2, H315	1, 3
Index: 601-023-00-4 CAS: 100-41-4 ES: 202-849-4	ethylbenzene	2,5-10	F; R 11 Xn; R 20	Flam. Liq. 2, H225 Acute Tox. 4, H332	1
Index: 603-064-00-3 CAS: 107-98-2 ES: 203-539-1	1-methoxy-2-propanol	2,5-10	R 10 R 67	Flam. Liq. 3, H226 STOT SE 3, H336	2
Index: 030-011-00-6 CAS: 7779-90-0 ES: 231-944-3	trizinc bis(orthophosphate)	2,5-10	N; R 50/53	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	

Notes

- 1 Note C: Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.
- 2 Substances for which there are exposure limits Community for working environment.
- 3 The substance with a specific concentration limit

The full text of all standard phrases and guidelines is specified in Section 16.

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SECTION 4: First aid measures**4.1. Description of first aid measures**

If any health problems are manifested or if in doubt, inform a doctor and show him information from this Safety Data Sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that respiratory pathways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled. In life threatening conditions first of all provide resuscitation of the affected person and ensure medical assistance. Respiratory arrest - provide artificial respiration immediately. Cardiac arrest - provide indirect cardiac massage immediately.

Inhalation

Terminate the exposure immediately; move the affected person to fresh air. Protect the person against growing cold. Provide medical treatment, especially if cough, dyspnoea or other symptoms persist.

Skin contact

Remove contaminated clothes. Wash the affected area with plenty of water, lukewarm if possible. Soap, soap solution or shampoo should be used if there is no skin injury. Provide medical treatment, especially if skin irritation persists.

Eye contact

Immediately flush eyes with running water, open eyelids (even violently); if a victim has contact lenses, remove them immediately. Rinse for at least 10 minutes. Ensure medical, preferably professional treatment.

Ingestion

DO NOT INDUCE VOMITING - even the inducing of vomiting by itself may cause complications (inhalation of the substance in respiratory pathways and lungs; mechanical damage to the mucous membrane of the pharynx; may pose a higher threat than the ingested substance in this case). If possible, give activated carbon in the amount of 5 crushed tablets. Provide medical treatment.

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

Possible irritation of respiratory pathways, cough, headache.

Skin contact

Painful reddening, irritation.

Eye contact

not available

Ingestion

Irritation, nausea.

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

Symptomatic treatment.

SECTION 5: Firefighting measures**5.1. Extinguishing media**

Suitable extinguishing media

alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist

Unsuitable extinguishing media

water - full jet

5.2. Special hazards arising from the substance or mixture

Heavy, black smoke is produced in a fire, with potential development of carbon monoxide and dioxide and other toxic gases. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

5.3. Advice for firefighters

Use a self-contained breathing apparatus and full-body protective clothing. Closed containers with the mixture near the fire should be cooled with water. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

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

The mixture is nonflammable. Provide sufficient ventilation. Use gloves in case of prolonged contact. Follow the instructions in Sections 7 and 8.

6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water. Do not allow to enter drains.

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- 6.3. Methods and material for containment and cleaning up
Spilled mixture should be covered with suitable (nonflammable) absorbing material (sand, kieselguhr, earth and other suitable absorption materials); to be contained in well closed containers and removed as per Section 13. Collected material should be disposed of in accordance with locally valid regulations. Upon an escape of large quantities of the mixture, inform the Fire Department and the Environmental Department of the Municipal Authority with extended scope of competencies. After removal of the mixture, wash the contaminated site with plenty of water or another suitable cleaning material. Do not use solvents.
- 6.4. Reference to other sections
7, 8 and 13.

SECTION 7: Handling and storage

- 7.1. Precautions for safe handling
Prevent formation of gases and vapours in flammable or explosive concentrations and concentrations exceeding the highest permissible concentration in the occupational environment. The mixture should be used only in areas where it is not in contact with open fire and other ignition sources. No smoking. Protect against direct sunlight. Electrostatic charge may form during use; use only earthed piping (tubing) when repumping. Use of antistatic clothes and footwear is recommended. Use non-sparking tools. Do not inhale gases and vapours. Prevent contact with skin and eyes. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection.
- 7.2. Conditions for safe storage, including any incompatibilities
Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Do not expose to sunlight.

Storage class	12 - Other non-combustible liquids
Content	9,6 kg
Material of package	FE (40), Steel (Metals)



FE

- 7.3. Specific end use(s)
not available

SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters
The mixture contains substances for which the following concentration limits in the workplace are determined.

European Union

Name of the substance (component)	CAS number	Limit values				Note
		8 hours		Short-term		
		mg/m ³	ppm	mg/m ³	ppm	
1-methoxy-2-propanol	107-98-2	375	100	568	150	*

Note

* skin

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8.2. Exposure controls

Follow usual measures for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. If exposure limits cannot be observed in this mode, suitable protection of respiratory pathways must be used. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

Eye and face protection

Goggles or face shield (depending on the nature of the work performed).

Skin protection

Hand protection: Protective gloves resistant product. Observe glove manufacturer specific recommendations in the selection of appropriate thickness, material and throughput. For prolonged or repeated contact use suitable protective creams for the skin coming into direct contact with the mixture. Observe additional manufacturer's recommendations. Other: Protective antistatic clothing made of natural fibers (cotton) or synthetic fibers, resistant to elevated temperatures. When contamination with skin, wash thoroughly.

Respiratory protection

Mask with a filter against organic vapours or a self-contained breathing apparatus as appropriate if exposure limit values of toxic substances are exceeded or in a poorly ventilated environment.

Thermal hazard

not available

Restriction of the environment exposure

Observe usual measures for protection of the environment, see Section 6.2.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Appearance	viscous colored liquid
physical state	liquid at 20°C
colour	data not available
Odour	characteristic (xylen)
Odour threshold	data not available
pH	data not available
Melting point/freezing point	data not available
Initial boiling point and boiling range	138-143 °C
Flash point	25 °C
Evaporation rate	0,7
Flammability (solid, gas)	data not available
Upper/lower flammability or explosive limits	
flammability limits	data not available
explosive limits	data not available
Vapour pressure	0,8 kPa at 20 °C
Vapour density	> 1
Relative density	data not available
Solubility(ies)	
solubility in water	insoluble
solubility in fats	data not available
Partition coefficient: n-octanol/water	data not available
Auto-ignition temperature	data not available
Decomposition temperature	data not available
Viscosity	data not available
Explosive properties	data not available
Oxidising properties	data not available

9.2. Other information

Density	1,2 g/cm ³
auto-ignition temperature	data not available

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SECTION 10: Stability and reactivity

- 10.1. Reactivity
Mixture is flammable.
- 10.2. Chemical stability
Under normal conditions, the mixture is stable.
- 10.3. Possibility of hazardous reactions
Under normal conditions, the mixture is stable.
- 10.4. Conditions to avoid
The mixture is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.
- 10.5. Incompatible materials
not available
- 10.6. Hazardous decomposition products
not available

SECTION 11: Toxicological information

- 11.1. Information on toxicological effects
No toxicological data is available for the mixture.

Acute toxicity

1-methoxy-2-propanol

Route of exposure	Parameter	Method	Value	Time of exposure	Species	Sex	Determining the value of	Source
oral	LD 50		6600 mg/kg		rat			
dermal	LD 50		13000 mg/kg		rat			

ethylbenzene

Route of exposure	Parameter	Method	Value	Time of exposure	Species	Sex	Determining the value of	Source
oral	LD 50		3500 mg/kg		rat			
dermal	LD 50		17800 mg/kg		rat			
inhalation (vapor)	LC 50		17400 mg/kg	4 hour	rat			

xylene

Route of exposure	Parameter	Method	Value	Time of exposure	Species	Sex	Determining the value of	Source
oral	LD 50		4300 mg/kg		rat			
dermal	LD 50		3200 mg/kg		rabbit			

Harmful by inhalation and skin contact

Corrosion/skin irritation

Causes skin irritation.

Serious eye damage / eye irritation

Based on available data, the classification criteria are not met.

Respiratory / skin sensitization

Based on available data, the classification criteria are not met.

Germ cells mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

Toxicity for specific target organ - single exposure

Based on available data, the classification criteria are not met.

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Toxicity for specific target organ - repeated exposure
Based on available data, the classification criteria are not met.
Aspiration hazard
Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity

xylene

Parameter	Method	Value	Time of exposure	Species	Environment	Determining the value of	Source
LC 50		26,7 mg/l		fishes (Pimephales promelas)			

Toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

not available

12.3. Bioaccumulative potential

Insignificant.

12.4. Mobility in soil

not available

12.5. Results of PBT and vPvB assessment

The mixture is not classified as PBT or vPvB.

12.6. Other adverse effects

not available

SECTION 13: Disposal considerations

Hazard of environmental contamination; remove waste in accordance with local and/or national regulations.

13.1. Waste treatment methods

Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to an authorised person for waste removal (specialized company) authorised for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

Legislation of waste

Law No.185 / 2001 Sb., On Waste and Act No. 188/2004 Coll. Supplementing Act No.185 / 2001 Sb. The law .477 / 2001 Sb., On packaging and amending some acts (Packaging Act), as amended. Decree .376 / 2001 Sb., On evaluation of dangerous properties of wastes, as amended. Decree No.381 / 2001 Sb., (Waste catalog), as amended. Decree .383 / 2001 Sb., On details of waste management, as amended. (Decree no. 41/2005 Coll. (Effective from 1 February 2005), no. 294/2005 Coll. (Effective as of August 5, 2005) no. 353/2005 Coll. (Effective date of its publication September 15, 2005), no. 351/2008 Coll. (effective from November 1, 2008), no. 478/2008 Coll. (effective from January 1, 2009), no. 61/2010 Coll. (effective from April 1, 2010), no. 170/2010 Coll. (15.6.2010))

Code of type of waste

080111

Type of waste

waste paint and varnish containing organic solvents or other dangerous substances

Subgroup of waste

wastes from MFSU and removal of paint and varnish

Waste group

WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS

Code of type of waste packaging

150110

Type of waste

packaging containing residues of or contaminated by dangerous substances

Subgroup of waste

packaging (including separately collected municipal packaging waste)

Waste group

WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED

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SECTION 14: Transport information

- 14.1. UN number
UN 1263
- 14.2. UN proper shipping name
PAINT
- 14.3. Transport hazard class(es)
3 Flammable liquids
- 14.4. Packing group
III - Less hazardous substances
- 14.5. Environmental hazards
not available
- 14.6. Special precautions for user
Reference in Sections 4 to 8.
- 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
not available

Additional information

The hazard identification number	30	(Kemler Code)
UN number	1263	
Classification code	F1	
Safety signs	3	



Marine transport - IMDG

Marine pollution No

SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006, as amended. Directives 67/548/EEC, as amended, and 1999/45/EC, as amended.
- 15.2. Chemical safety assessment
not available

16. SECTION 16: Other information

A list of standard risk phrases used in the safety data sheet

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

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Guidelines for safe handling used in the safety data sheet

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P261	Avoid breathing spray
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container to local regulations.

List of R-phrases used in the safety data sheet

R 10	Flammable.
R 11	Highly flammable.
R 20	Harmful by inhalation.
R 20/21	Harmful by inhalation and in contact with skin.
R 38	Irritating to skin.
R 67	Vapours may cause drowsiness and dizziness.
R 50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Other important information about safety of human health

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per Section 1. The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet

ADR	European agreement concerning the international carriage of dangerous goods by road
BCF	Bioconcentration Factor
CAS	Unique Numeric Identifier used in chemistry for chemical substances
CLP	Classification, Labelling and Packaging
DNEL	Derived no-effect level
EC50	Concentration of a substance when it is affected 50% of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
Ems	Emergency plan
ErC50	Environmental Release category
ES	Identification code for each substance listed in EINECS
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
IC50	Concentration causing 50 % blockade
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Transport
LC50	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD50	Lethal dose of a substance in which it can be expected death of 50% of the population
LOAEC	Lowest observed adverse effect concentration
LOAEL	Lowest observed adverse effect level
Log Kow	Octanol-water partition coefficient
MARPOL	International Convention for the Prevention of Pollution From Ships
MFAG	First Aid Manual
NOAEC	No observed adverse effect concentration
NOAEL	No observed adverse effect level
NOEC	No observed effect concentration
NOEL	No observed effect level
NPK	The maximum permissible concentration
PBT	Persistent ,Bioaccumulative and Toxic
PEL	Permissible Exposure Limit

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PNEC	Predicted no-effect concentration
REACH	Registration, Evaluation and Restriction of chemicals (EP and Council Regulation (EC) No.1907/2006)
RID	Agreement on the transport of dangerous goods by rail
UN	Four-digit code reflecting the characteristics of substances or mixtures in transport
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative

Acute Tox.	Acute toxicity
Aquatic Acute	Hazardous to the aquatic environment
Aquatic Chronic	Hazardous to the aquatic environment
Flam. Liq.	Flammable liquid
Skin Irrit.	Skin irritation
STOT SE	Specific target organ toxicity - single exposure

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the mixture.

Recommended restrictions of use
not available

Information about the sources of data used to compile the data sheet

REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended, REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended, COMMISSION REGULATION (EU) No 453/2010, COUNCIL DIRECTIVE 67/548/EEC as amended and 1999/45/EC, COMMISSION REGULATION (EU) No 286/2011 amending, for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures.

Statement

The Safety Data Sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.

BETOFIX SW UV top component B

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

- 1.1. Product identifier
substance / mixture
Number
Other names of the mixture
- BETOFIX SW UV top component B
mixture
2-41
- 1.2. Relevant identified uses of the substance or mixture and uses advised against
Intended use of the mixture
Not recommended use of the mixture
- Two-component protective coating on the basis of epoxy resins
The product should not be used in ways other than those referred in Section 1.
- 1.3. Details of the supplier of the safety data sheet
Manufacturer
Name or trade name
Place of business or residency
Telephone
Fax
E-mail
Web address
Emergency telephone number
Competent person responsible for the safety data sheet
Name
E-mail
- BETOSAN s.r.o.
Na Dolinách 28, Praha 4, 147 00
Czech Republic
241 431 212
241 431 212
praha@betosan.cz
www.betosan.cz
241 431 212, 8,00-16,00
BETOSAN s.r.o.
praha@betosan.cz
- 1.4. Emergency telephone number
Toxicological Information Centre, Na Bojišti 1, Praha, Tel.: non-stop 224 919 293 or 224 915 402, Information on health risks only - acute poisoning of humans and animals

SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture
Classification of the mixture in accordance with Regulation (EC) No 1272/2008
A mixture is classified as dangerous.

Flam. Liq. 3, H226
Skin Irrit. 2, H315
Skin Sens. 1B, H317
Acute Tox. 4, H332

The classification of the mixture according to Directive 1999/45/EC
The mixture has not been classified.

Full text of all classifications, H-phrases and R-phrases is given in the section 16.

The most serious adverse physicochemical effects
Flammable liquid and vapour.

The most serious adverse effects on human health and the environment
Causes skin irritation. May cause an allergic skin reaction. Harmful if inhaled.

- 2.2. Label elements
Warning symbol



Signal word
Warning

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Hazardous substances

homopolymer
2-methoxy-1-methylethyl acetate
xylene
ethylbenzene
hexamethylene-di-isocyanate

Hazard statements

H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H332 Harmful if inhaled.

Instructions for safe handling

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray
P262 Do not get in eyes, on skin, or on clothing.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container to local regulations.

Additional information

EUH 204 Contains isocyanates. May produce an allergic reaction.

Requirements for child-resistant fastenings and tactile warning of danger
Container has to be fitted with a tactile warning of danger.

2.3. Other hazards
not available

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixture of substances specified below and additives.

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Name of the substance	Content in % weight	Classification according to Directive 67/548/EEC	Classification according to Regulation (EC) No 1272/2008	Note
CAS: 28182-81-2 ES: 212-485-8	homopolymer	50-80		Skin Sens. 1B, H317	
Index: 607-195-00-7 CAS: 108-65-6 ES: 203-603-9	2-methoxy-1-methylethyl acetate	10-25	R 10	Flam. Liq. 3, H226	3
Index: 601-022-00-9 CAS: 1330-20-7 ES: 215-535-7	xylene	2,5-10	R 10 Xn; R 20/21 Xi; R 38	Flam. Liq. 3, H226 Acute Tox. 4, H312, H332 Skin Irrit. 2, H315	1, 3, 4
Index: 601-023-00-4 CAS: 100-41-4 ES: 202-849-4	ethylbenzene	1-2,5	F; R 11 Xn; R 20	Flam. Liq. 2, H225 Acute Tox. 4, H332	3
Index: 615-011-00-1 CAS: 822-06-0 ES: 212-485-8	hexamethylene-di-isocyanate	<0,5	T; R 23 Xi; R 36/37/38 R 42/43	Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319 Acute Tox. 3, H331 Resp. Sens. 1, H334 STOT SE 3, H335	2, 4

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Notes

- 1 Note C: Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.
- 2 Note 2: The concentration of isocyanate stated is the percentage by weight of the free monomer calculated with reference to the total weight of the mixture.
- 3 Substances for which there are exposure limits Community for working environment.
- 4 The substance with a specific concentration limit

The full text of all standard phrases and guidelines is specified in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

If any health problems are manifested or if in doubt, inform a doctor and show him information from this Safety Data Sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that respiratory pathways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled. In life threatening conditions first of all provide resuscitation of the affected person and ensure medical assistance. Respiratory arrest - provide artificial respiration immediately. Cardiac arrest - provide indirect cardiac massage immediately.

Inhalation

Terminate the exposure immediately; move the affected person to fresh air. Protect the person against growing cold. Provide medical treatment, especially if cough, dyspnoea or other symptoms persist.

Skin contact

Remove contaminated clothes. Wash the affected area with plenty of water, lukewarm if possible. Soap, soap solution or shampoo should be used if there is no skin injury. Provide medical treatment, especially if skin irritation persists.

Eye contact

Immediately flush eyes with running water, open eyelids (even violently); if a victim has contact lenses, remove them immediately. Rinse for at least 10 minutes. Ensure medical, preferably professional treatment.

Ingestion

DO NOT INDUCE VOMITING - even the inducing of vomiting by itself may cause complications (inhalation of the substance in respiratory pathways and lungs; mechanical damage to the mucous membrane of the pharynx; may pose a higher threat than the ingested substance in this case). If possible, give activated carbon in the amount of 5 crushed tablets. Provide medical treatment.

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

Inhalation

Possible irritation of respiratory pathways, cough, headache.

Skin contact

Painful reddening, irritation.

Eye contact

not available

Ingestion

Irritation, nausea.

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

Symptomatic treatment.

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SECTION 5: Firefighting measures

- 5.1. Extinguishing media
Suitable extinguishing media
alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist
Unsuitable extinguishing media
water - full jet
- 5.2. Special hazards arising from the substance or mixture
Heavy, black smoke is produced in a fire, with potential development of carbon monoxide and dioxide and other toxic gases. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.
- 5.3. Advice for firefighters
Use a self-contained breathing apparatus and full-body protective clothing. Closed containers with the mixture near the fire should be cooled with water. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

SECTION 6: Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures
not available
- 6.2. Environmental precautions
Prevent contamination of the soil and entering surface or ground water. Do not allow to enter drains.
- 6.3. Methods and material for containment and cleaning up
Spilled mixture should be covered with suitable (nonflammable) absorbing material (sand, kieselguhr, earth and other suitable absorption materials); to be contained in well closed containers and removed as per Section 13. Collected material should be disposed of in accordance with locally valid regulations. Upon an escape of large quantities of the mixture, inform the Fire Department and the Environmental Department of the Municipal Authority with extended scope of competencies. After removal of the mixture, wash the contaminated site with plenty of water or another suitable cleaning material. Do not use solvents.
- 6.4. Reference to other sections
7, 8 and 13.

SECTION 7: Handling and storage

- 7.1. Precautions for safe handling
not available
- 7.2. Conditions for safe storage, including any incompatibilities
not available
- | | |
|---------------------|---------------------------------------|
| Storage class | 8A - Combustible corrosive substances |
| Content | 2,2 kg |
| Type of packaging | plechovka |
| Material of package | FE (40), Steel (Metals) |
- 
FE
- 7.3. Specific end use(s)
not available

SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters
none

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8.2. Exposure controls

Follow usual measures for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. If exposure limits cannot be observed in this mode, suitable protection of respiratory pathways must be used. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

Eye and face protection

Protective goggles or face shield (based on the nature of the work performed).

Skin protection

Hand protection: Protective gloves resistant against the product. Observe recommendations of the particular manufacturer of the gloves in the choice of their appropriate thickness, material and permeability. Use barrier creams for skin protection, they should however not be applied once exposure has occurred. Observe other recommendations of the manufacturer. Other protection: Protective antistatic clothing made of natural fibres (cotton) or synthetic fibres resistant against elevated temperatures. Contaminated skin should be washed thoroughly.

Respiratory protection

Mask with a filter against organic vapours or a self-contained breathing apparatus as appropriate if exposure limit values of toxic substances are exceeded or in a poorly ventilated environment.

Thermal hazard

not available

Restriction of the environment exposure

Observe usual measures for protection of the environment, see Section 6.2.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Appearance	viscous colored liquid
physical state	liquid at 20°C
colour	data not available
Odour	characteristic (xylen)
Odour threshold	data not available
pH	data not available
Melting point/freezing point	data not available
Initial boiling point and boiling range	145 °C
Flash point	38 °C
Evaporation rate	0,7 – xylen (n-butylacetát = 1)
Flammability (solid, gas)	data not available
Upper/lower flammability or explosive limits	
flammability limits	data not available
explosive limits	
bottom	1 %
upper	10 %
Vapour pressure	data not available
Vapour density	>1
Relative density	data not available
Solubility(ies)	
solubility in water	insoluble
solubility in fats	data not available
Partition coefficient: n-octanol/water	data not available
Auto-ignition temperature	data not available
Decomposition temperature	data not available
Viscosity	> 30
Explosive properties	data not available
Oxidising properties	data not available

9.2. Other information

Density	1,1 g/cm ³
auto-ignition temperature	data not available

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SECTION 10: Stability and reactivity

- 10.1. Reactivity
Mixture is flammable.
- 10.2. Chemical stability
Under normal conditions, the mixture is stable.
- 10.3. Possibility of hazardous reactions
Under normal conditions, the mixture is stable.
- 10.4. Conditions to avoid
The mixture is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.
- 10.5. Incompatible materials
Protect against strong acids, bases and oxidizing agents. Thereby a dangerous exothermic reaction will be prevented.
- 10.6. Hazardous decomposition products
Not developed under normal uses. Dangerous products are formed at high temperature and in fire, such as carbon monoxide and carbon dioxide, heavy smoke and nitrogen oxides.

SECTION 11: Toxicological information

- 11.1. Information on toxicological effects
No toxicological data is available for the mixture.

Acute toxicity

2-methoxy-1-methylethyl acetate

Route of exposure	Parameter	Method	Value	Time of exposure	Species	Sex	Determining the value of	Source
oral	LD 50		8532 mg/kg		rat			

ethylbenzene

Route of exposure	Parameter	Method	Value	Time of exposure	Species	Sex	Determining the value of	Source
oral	LD 50		3500 mg/kg		rat			
dermal	LD 50		17800 mg/kg		rat			
inhalation (vapor)	LC 50		17400 mg/kg	4 hour	rat			

xylene

Route of exposure	Parameter	Method	Value	Time of exposure	Species	Sex	Determining the value of	Source
oral	LD 50		4300 mg/kg		rat			
dermal	LD 50		3200 mg/kg		rabbit			

Harmful if inhaled.

Corrosion/skin irritation

Causes skin irritation.

Serious eye damage / eye irritation

Based on available data, the classification criteria are not met.

Respiratory / skin sensitization

May cause an allergic skin reaction.

Germ cells mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

Toxicity for specific target organ - single exposure

Based on available data, the classification criteria are not met.

Toxicity for specific target organ - repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

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Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity

2-methoxy-1-methylethyl acetate

Parameter	Method	Value	Time of exposure	Species	Environment	Determining the value of	Source
LC 50		180 mg/l	96 hour	fishes			
EC 50		500 mg/l	48 hour	daphnia			

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Parameter	Method	Value	Time of exposure	Species	Environment	Determining the value of	Source
LC 50		8500 mg/kg	48 hour	other aquatic organisms			xylene
LC 50		>100,0 mg/kg	96 hour	fishes (Oncorhynchus mykiss)			xylene
EC 50		>100,0 mg/kg	48 hour	invertebrates			xylene
IC 50		>100,0 mg/kg	72 hour	algae (Selenastrum capricornutum)			xylene

xylene

Parameter	Method	Value	Time of exposure	Species	Environment	Determining the value of	Source
LC 50		26,7 mg/l		fishes (Pimephales promelas)			

The product contains no substances with an effect against active action of microorganisms.

12.2. Persistence and degradability

not available

12.3. Bioaccumulative potential

Insignificant.

12.4. Mobility in soil

not available

12.5. Results of PBT and vPvB assessment

The mixture is not classified as PBT or vPvB.

12.6. Other adverse effects

not available

SECTION 13: Disposal considerations

Hazard of environmental contamination; remove waste in accordance with local and/or national regulations.

13.1. Waste treatment methods

Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to an authorised person for waste removal (specialized company) authorised for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

Legislation of waste

Council Directive 75/442/EEC on waste, at last amended. Council Directive 91/689/EEC on hazardous waste, as last amended. Decision 94/3/EC establishing a list of wastes, as last amended.

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Code of type of waste	080111
Type of waste	waste paint and varnish containing organic solvents or other dangerous substances
Subgroup of waste	wastes from MFSU and removal of paint and varnish
Waste group	WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS
Code of type of waste packaging	150203
Type of waste	absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02
Subgroup of waste	absorbents, filter materials, wiping cloths and protective clothing
Waste group	WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED

SECTION 14: Transport information

- 14.1. UN number
UN 1263
- 14.2. UN proper shipping name
PAINT
- 14.3. Transport hazard class(es)
3 Flammable liquids
- 14.4. Packing group
III - Less hazardous substances
- 14.5. Environmental hazards
not available
- 14.6. Special precautions for user
Reference in Sections 4 to 8.
- 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
not available

Additional information

The hazard identification number	30	(Kemler Code)
UN number	1263	
Classification code	F1	
Safety signs	3	



Marine transport - IMDG

Marine pollution No

SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006, as amended. Directives 67/548/EEC, as amended, and 1999/45/EC, as amended.

- 15.2. Chemical safety assessment
not available

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16. SECTION 16: Other information

A list of standard risk phrases used in the safety data sheet

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.

Guidelines for safe handling used in the safety data sheet

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray
P262	Do not get in eyes, on skin, or on clothing.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container to local regulations.

A list of additional standard phrases used in the safety data sheet

EUH 204	Contains isocyanates. May produce an allergic reaction.
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List of R-phrases used in the safety data sheet

R 10	Flammable.
R 11	Highly flammable.
R 20	Harmful by inhalation.
R 20/21	Harmful by inhalation and in contact with skin.
R 23	Toxic by inhalation.
R 36/37/38	Irritating to eyes, respiratory system and skin.
R 38	Irritating to skin.
R 42/43	May cause sensitization by inhalation and skin contact.

Other important information about safety of human health

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per Section 1. The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet

ADR	European agreement concerning the international carriage of dangerous goods by road
BCF	Bioconcentration Factor
CAS	Unique Numeric Identifier used in chemistry for chemical substances
CLP	Classification, Labelling and Packaging
DNEL	Derived no-effect level
EC50	Concentration of a substance when it is affected 50% of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
Ems	Emergency plan
ErC50	Environmental Release category
ES	Identification code for each substance listed in EINECS
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
IC50	Concentration causing 50 % blockade

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ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Transport
LC50	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD50	Lethal dose of a substance in which it can be expected death of 50% of the population
LOAEC	Lowest observed adverse effect concentration
LOAEL	Lowest observed adverse effect level
Log Kow	Octanol-water partition coefficient
MARPOL	International Convention for the Prevention of Pollution From Ships
MFAG	First Aid Manual
NOAEC	No observed adverse effect concentration
NOAEL	No observed adverse effect level
NOEC	No observed effect concentration
NOEL	No observed effect level
NPK	The maximum permissible concentration
PBT	Persistent ,Bioaccumulative and Toxic
PEL	Permissible Exposure Limit
PNEC	Predicted no-effect concentration
REACH	Registration, Evaluation and Restriction of chemicals (EP and Council Regulation (EC) No.1907/2006)
RID	Agreement on the transport of dangerous goods by rail
UN	Four-digit code reflecting the characteristics of substances or mixtures in transport
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative

Acute Tox.	Acute toxicity
Eye Irrit.	Eye irritation
Flam. Liq.	Flammable liquid
Resp. Sens.	Respiratory sensitization
Skin Irrit.	Skin irritation
Skin Sens	Skin sensitization
Skin Sens.	Skin sensitization
STOT SE	Specific target organ toxicity - single exposure

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the mixture.

Recommended restrictions of use
not available

Information about the sources of data used to compile the data sheet

REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended, REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended, COMMISSION REGULATION (EU) No 453/2010, COUNCIL DIRECTIVE 67/548/EEC as amended and 1999/45/EC, COMMISSION REGULATION (EU) No 286/2011 amending, for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures.

Statement

The Safety Data Sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.