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Safety data sheet

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

1.1. Product identifier

Product name Chemical name and synonym NAUTILUS EPOXY PRIMER COMPONENT B INDURITORE PER EPOSSIDICI

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

Intended use VERNICI / SMALTI NAUTICA-MARINA

Identified Uses	Industrial	Professional	Consumer
Prodotto verniciante per nautica outdoor	X	×	X
Prodotto verniciante per usi industriali		-	-
Prodotto verniciante per nautica indoor	×	×	×
Prodotto verniciante per uso professionale	-	×	-

1.3 Details of the supplier of the safety data sheet Manufacturer/Supplier:

Cecchi Gustavo & C. srl - Via M. Coppino 253,

55049 Viareggio (LU) ITALY www.cecchi.it - info@cecchi.it

1.4 Emergency telephone number:

+39 0584/383694 - info@cecchi.it

From monday to friday office hours 8:30 - 12:30, 14:00 - 18:30

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Flammable liquid, category 3	H226	Flammable liquid and vapour.
Acute toxicity, category 4	H332	Harmful if inhaled.
Specific target organ toxicity - repeated exposure, category 2	H373	May cause damage to organs through prolonged or repeated
		exposure.
Skin corrosion, category 1B	H314	Causes severe skin burns and eye damage.
Serious eye damage, category 1	H318	Causes serious eye damage.
Specific target organ toxicity - single exposure, category 3	H335	May cause respiratory irritation.
Skin sensitization, category 1A	H317	May cause an allergic skin reaction.
Specific target organ toxicity - single exposure, category 3	H336	May cause drowsiness or dizziness.
Hazardous to the aquatic environment, chronic toxicity,	H411	Toxic to aquatic life with long lasting effects.
category 2		

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:

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Signal words: Danger

Hazard statements:

H226 Flammable liquid and vapour.

H332 Harmful if inhaled.

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

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.
 H317 May cause an allergic skin reaction.
 H336 May cause drowsiness or dizziness.
 H411 Toxic to aquatic life with long lasting effects.

EUH208 Contains:

TRIETHYLENETETRAMINE

May produce an allergic reaction.

Precautionary statements:

P102 Keep out of reach of children.

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

P260 Do not breathe dust / fume / gas / mist / vapours / spray.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue

rinsing.

P501 Dispose of contents / container to . . .

Contains: XYLENE (MIXTURE OF ISOMERS)

3-AMINOPROPYLTRI-ETHOXYSILANO

ISOBUTYL ALCOHOL

BUTANOL

POLIAMMINOAMMIDE
TRIETHYLENETETRAMINE

Product not intended for uses provided for by Dir. 2004/42/CE.

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

SECTION 3. Composition/information on ingredients

3.1. Substances

Information not relevant

3.2. Mixtures

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Contains:

Identification	x = Conc. %	Classification 1272/2008
POLIAMMINOAMMIDE		(CLP)
CAS 68082-29-1	30 ≤ x < 40	Eye Dam. 1 H318, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 2 H411
EC 500-191-5 INDEX -		·
Reg. no. 01-2119972320-44-XXXX		
XYLENE (MIXTURE OF ISOMERS)		
CAS 1330-20-7	20 ≤ x < 25	Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Aquatic Chronic 3 H412, Note C
EC 215-535-7		
INDEX 601-022-00-9		
Reg. no. 01-2119488216-32-XXXX		
ISOBUTYL ALCOHOL CAS 78-83-1	10 ≤ x < 20	Flam. Liq. 3 H226, Eye Dam.
CAS 70-03-1	10 3 % 20	1 H318, Skin Irrit. 2 H315, STOT SE 3 H335, STOT SE 3 H336
EC 201-148-0		311030
INDEX 603-108-00-1		
Reg. no. 01-2119484609-23		
4-METHYLPENTAN-2-ONE		
CAS 108-10-1	10 ≤ x < 20	Flam. Liq. 2 H225, Acute Tox. 4 H332, Eye Irrit. 2 H319, STOT SE 3 H335, EUH066
EC 203-550-1		0.0.000, 20.000
INDEX 606-004-00-4		
Reg. no. 01-2119473980-30		
XYLENE (MIXTURE OF ISOMERS)		
CAS 1330-20-7	7,5 ≤ x < 10	Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Skin Irrit. 2 H315, Note C
EC 215-535-7		
INDEX 601-022-00-9		
Reg. no. 01-2119488216-32-XXXX		
3-AMINOPROPYLTRI-ETHOXYSILANO		
CAS 919-30-2	$5 \le x < 7,5$	Acute Tox. 4 H302, Skin Corr. 1B H314, Skin Sens. 1 H317
EC 213-048-4		10 110 14, OKIII OBIIS. 1 FIO 17
INDEX 612-108-00-0		
Reg. no. 01-2119480479-24-0001		
ETHYLBENZENE		

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CAS 100-41-4 $5 \le x < 7.5$ Flam. Liq. 2 H225, Acute Tox. 4 H332, Asp. Tox. 1 H304,

STOT RE 2 H373

EC 202-849-4

INDEX 601-023-00-4

BUTANOL

CAS 71-36-3 $3 \le x < 5,5$ Flam. Liq. 3 H226, Acute Tox.

4 H302, Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335, STOT SE 3 H336

EC 200-751-6

INDEX 603-004-00-6

TRIETHYLENETETRAMINE

CAS 90640-67-8 $0 \le x < 1$ Acute Tox. 4 H302, Acute

Tox. 4 H312, Skin Corr. 1B H314, Skin Sens. 1A H317, Aquatic Chronic 3 H412

EC 292-588-2

INDEX -

Reg. no. 01-2119487919-13

The full wording of hazard (H) phrases is given in section 16 of the sheet.

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a

INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

SECTION 5. Firefighting measures

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5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

UNSUITABLE EXTINGUISHING EQUIPMENT

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

Send away individuals who are not suitably equipped. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. If the product is flammable, use explosion-proof equipment. Evaluate the compatibility of the

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container to be used, by checking section 10. Absorb the remainder with inert absorbent material. Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Vapours may catch fire and an explosion may occur; vapour accumulation is therefore to be avoided by leaving windows and doors open and ensuring good cross ventilation. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. When performing transfer operations involving large containers, connect to an earthing system and wear antistatic footwear. Vigorous stirring and flow through the tubes and equipment may cause the formation and accumulation of electrostatic charges. In order to avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurised. Do not eat, drink or smoke during use. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Store in a well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

Storage class TRGS 510 (Germany):

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

DEU Deutschland MAK-und BAT-Werte-Liste 2012

ESP España INSHT - Límites de exposición profesional para agentes químicos en

España 2015

FRA JORF n°0109 du 10 mai 2012 page 8773 texte n° 102 France

GBR United Kingdom EH40/2005 Workplace exposure limits

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ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
NLD	Nederland	Databank of the social and Economic Concil of Netherlands (SER) Values, AF 2011:18
POL	Polska	ROZPORZĄDZENIE MINISTRA PRACY I POLITYKI SPOŁECZNEJ z dnia 16 grudnia 2011r
PRT	Portugal	Ministério da Economia e do Emprego Consolida as prescrições mínimas em matéria de protecção dos trabalhadores contra os riscos para a segurança e a saúde devido à exposição a agentes químicos no trabalho - Diaro da Republica I 26; 2012-02-06
EU	OEL EU	Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2016

XYLENE (MIXTURE OF Threshold Limit Value							
Type	Country	TWA/8h		STEL/15min			
		mg/m3	ppm	mg/m3	ppm		
AGW	DEU	440	100	880	200	SKIN	
MAK	DEU	440	100	880	200	SKIN	
VLA	ESP	221	50	442	100	SKIN	
VLEP	FRA	221	50	442	100	SKIN	
WEL	GBR	220	50	441	100		
VLEP	ITA	221	50	442	100	SKIN	
OEL	NLD	210		442		SKIN	
NDS	POL	100					
OEL	EU	221	50	442	100	SKIN	
TLV-ACGIH		434	100	651	150		
Predicted no-effect concent	tration - PNEC						
Normal value in fresh water				0,327	m	g/I	
Normal value in marine wat	ter			0,327	m	g/I	
Normal value for fresh wate	er sediment			12,46	m	g/kg	
Normal value for marine wa	ater sediment			12,46	m	g/kg	
Normal value of STP micro	organisms			6,58	m	g/I	
Normal value for the terrest	trial compartment			2,31	m	g/kg	

4-METHYLPENTAN-2-ONE						
Threshold Limit Value	0 1	T\A(A(O)		OTE: 45 :		
Туре	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	83	20	166	40	SKIN
MAK	DEU	83	20	166	40	SKIN
VLA	ESP	83	20	208	50	
VLEP	FRA	83	20	208	50	
WEL	GBR	208	50	416	100	SKIN
VLEP	ITA	83	20	208	50	
OEL	NLD	104		208		
NDS	POL	83		200		

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VLE	PRT	83	20	208	50
OEL	EU	83	20	208	50
TLV-ACGIH		82	20	307	75

ISOBUTYL ALCOHOL Threshold Limit Value						
Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	310	100	310	100	
MAK	DEU	310	100	310	100	
VLA	ESP	154	50			
VLEP	FRA	150	50			
WEL	GBR	154	50	231	75	
OEL	NLD	150				
NDS	POL	100		200		
TLV-ACGIH		152	50			
Predicted no-effect concentration	ion - PNEC					
Normal value in fresh water				0,4		mg/l
Normal value in marine water				0,04		mg/l
Normal value for fresh water s	ediment			1,52		mg/kg d.w
Normal value for marine water	sediment			0,152		mg/kg d.w.
Normal value for water, interm	ittent release			11		mg/l
Normal value of STP microorg	anisms			10		mg/l
Normal value for the terrestrial	compartment			0,0699		mg/kg d.w
Health - Derived no-effec	t level - DNEL / Effects on	DMEL			Effects o	on

Effects on consumers workers

Route of exposure

Oral

Effects on workers

25 mg/kg d.w. VND

 Inhalation
 310 mg/m3
 VND
 55 mg/m3
 VND

XYLENE (MIXTURE OF ISC	MERS)						
Threshold Limit Value Type	Country	TWA/8h		STEL/15min			
		mg/m3	ppm	mg/m3	ppm		
AGW	DEU	440	100	880	200	SKIN	
MAK	DEU	440	100	880	200	SKIN	
VLA	ESP	221	50	442	100	SKIN	
VLEP	FRA	221	50	442	100	SKIN	
WEL	GBR	220	50	441	100		
VLEP	ITA	221	50	442	100	SKIN	
OEL	NLD	210		442		SKIN	
NDS	POL	100					
VLE	PRT	221	50	442	100	SKIN	
OEL	EU	221	50	442	100	SKIN	
TLV-ACGIH		434	100	651	150		

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Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,327	mg/l
Normal value in marine water	0,327	mg/l
Normal value for fresh water sediment	12,46	mg/kg
Normal value for marine water sediment	12,46	mg/kg
Normal value of STP microorganisms	6,58	mg/l
Normal value for the terrestrial compartment	2,31	mg/kg

ETHYLBENZENE Threehold Limit Volum						
Threshold Limit Value Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	440	100	880	200	SKIN
MAK	DEU	88	20	176	40	SKIN
VLA	ESP	441	100	884	200	SKIN
VLEP	FRA	88,4	20	442	100	SKIN
WEL	GBR	441	100	552	125	SKIN
VLEP	ITA	442	100	884	200	SKIN
OEL	NLD	215		430		SKIN
NDS	POL	200		400		
VLE	PRT	442	100	884	200	SKIN
OEL	EU	442	100	884	200	SKIN
TLV-ACGIH		87	20			

BUTANOL						
Threshold Limit Value Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	310	100	310	100	
MAK	DEU	310	100	310	100	
VLA	ESP	61	20	154	50	SKIN
VLEP	FRA			150	50	
WEL	GBR			154	50	SKIN
OEL	NLD			45		
NDS	POL	50		150		
TLV-ACGIH		61	20			

Legend:

(C) = CEILING; INHAL = Inhalable Fraction; RESP = Respirable Fraction; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

TLV of solvent mixture: 147 mg/m3

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8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

Exposure levels must be kept as low as possible to avoid significant build-up in the organism. Manage personal protective equipment so as to guarantee maximum protection (e.g. reduction in replacement times).

HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, wear a mask with a type AX filter, whose limit of use will be defined by the manufacturer (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance liquid

Colour
Co

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Not available **Evaporation Rate** Not available Flammability of solids and gases Lower inflammability limit Not available Upper inflammability limit Not available Not available Lower explosive limit Upper explosive limit Not available Vapour pressure Not available Vapour density Not available

Relative density 0,89

Solubility 20% BY WT IN WATER

Partition coefficient: n-octanol/water Not available Auto-ignition temperature Not available Decomposition temperature Not available

Viscosity >10 mm2/sec (DIN ISO Cup 3 mm)

Explosive properties Not available Oxidising properties Not available

9.2. Other information

Total solids (250°C / 482°F) 37,98 %

VOC (Directive 2010/75/EC): 62,01 % - 548,90 g/litre VOC (volatile carbon): 49,41 % - 437,34 g/litre

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

4-METHYLPENTAN-2-ONE

Reacts violently with: light metals. Attacks various types of plastic materials.

BUTANOL

Attacks various types of plastic materials.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

The vapours may also form explosive mixtures with the air.

XYLENE (MIXTURE OF ISOMERS)

XYLENE (MIXTURE OF ISOMERS): stable, but may develop violent reactions in the presence of strong oxidising agents such as sulphuric and nitric acids and perchlorates. May form explosive mixtures with the air.

4-METHYLPENTAN-2-ONE

May react violently with: oxidising agents. Forms peroxides with: air. Forms explosive mixtures with: hot air.

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XYLENE (MIXTURE OF ISOMERS)

Stable in normal conditions of use and storage. Reacts violently with: strong oxidants, strong acids, nitric acid, perchlorates. May form explosive mixtures with: air.

ETHYLBENZENE

Reacts violently with: strong oxidants. Attacks various types of plastic materials. May form explosive mixtures with: air.

BUTANOL

Reacts violently developing heat on contact with: aluminium,strong oxidising agents,strong reducing agents,hydrochloric acid.Forms explosive mixtures with: air.

10.4. Conditions to avoid

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

4-METHYLPENTAN-2-ONE

Avoid exposure to: sources of heat.

BUTANOL

Avoid exposure to: sources of heat, naked flames

10.5. Incompatible materials

4-METHYLPENTAN-2-ONE

Incompatible with: oxidising substances, reducing substances.

10.6. Hazardous decomposition products

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

ETHYLBENZENE

May develop: methane, styrene, hydrogen, ethane.

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

11.1. Information on toxicological effects

XYLENE (MIXTURE OF ISOMERS)

XYLENE (MIXTURE OF ISOMERS): has a toxic effect on the CNS (encephalopathies). Irritating to the skin, conjunctivae, cornea and respiratory apparatus.

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Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

XYLENE (MIXTURE OF ISOMERS)

WORKERS: inhalation: contact with the skin.

POPULATION: ingestion of contaminated food or water; inhalation of ambient air.

ETHYLBENZENE

WORKERS: inhalation; contact with the skin.

POPULATION: ingestion of contaminated food or water; contact with the skin of products containing the substance.

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

XYLENE (MIXTURE OF ISOMERS)

Toxic effect on the central nervous system (encephalopathy); irritating for the skin, conjunctiva, cornea and respiratory apparatus.

ETHYLBENZENE

As the counterparts of benzene, may have an acute effect on the central nervous system, with depression, narcosis, often preceded by dizziness and associated with headache (Ispesl). Is irritating for skin, conjunctiva and respiratory tract.

Interactive effects

XYLENE (MIXTURE OF ISOMERS)

Intake of alcohol interferes with the metabolism of the substance, inhibiting it. Ethanol consumption (0.8 g/kg) before a 4-hour exposure to xylene vapours (145 and 280 ppm) causes a 50% reduction in the excretion of methyl hippuric acid, whereas the concentration of xylenes in the blood increases approx. 1.5-2 times. At the same time there is an increase in the secondary side effects of the ethanol. The metabolism of the xylenes is increased by phenobarbital and 3-methyl-colantrene type enzyme inducers. Aspirin and xylenes mutually inhibit their conjugation with the glycine, which results in a decrease in urinary excretion of methyl hippuric acid. Other industrial products can interfere with the metabolism of xylenes.

ACUTE TOXICITY

LC50 (Inhalation) of the mixture:18,40 mg/l

LD50 (Oral) of the mixture:>2000 mg/kg

LD50 (Dermal) of the mixture:>2000 mg/kg

XYLENE (MIXTURE OF ISOMERS)

LD50 (Oral) 3523 mg/kg Rat

LD50 (Dermal) 4350 mg/kg Rabbit

LC50 (Inhalation)

ISOBUTYL ALCOHOL

LD50 (Oral) 2460 mg/kg Rat

LD50 (Dermal) 2460 mg/kg Rabbit

LC50 (Inhalation)

ETHYLBENZENE

LD50 (Oral) 3500 mg/kg Rat

LD50 (Dermal) 15354 mg/kg Rabbit

LC50 (Inhalation)

BUTANOL

LD50 (Oral) 790 mg/kg Rat

LD50 (Dermal) 3400 mg/kg Rabbit

LC50 (Inhalation)

4-METHYLPENTAN-2-ONE

LD50 (Oral) 2080 mg/kg Rat

LD50 (Dermal) > 16000 mg/kg Rabbit

LC50 (Inhalation)

3-AMINOPROPYLTRI-ETHOXYSILANO

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LD50 (Oral) > 1570 mg/kg ratto LD50 (Dermal) > 3800 mg/kg coniglio

XYLENE (MIXTURE OF ISOMERS) LD50 (Oral) 3523 mg/kg Rat LD50 (Dermal) 4350 mg/kg Rabbit LC50 (Inhalation)

TRIETHYLENETETRAMINE

LD50 (Oral) > 1716 mg/kg FONTE: OCDE 401 SPECIE: RATTO LD50 (Dermal) > 1465 mg/kg FONTE: OCDE 402 SPECIE: CONIGLIO

SKIN CORROSION / IRRITATION

Corrosive for the skin

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skinMay produce an allergic reaction.Contains:TRIETHYLENETETRAMINE

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

XYLENE (MIXTURE OF ISOMERS)

Classified in Group 3 (not classifiable as a human carcinogen) by the International Agency for Research on Cancer (IARC).

The US Environmental Protection Agency (EPA) affirms that "the data is inadequate for an assessment of the carcinogenic potential".

ETHYLBENZENE

Classified in Group 2B (possible human carcinogen) by the International Agency for Research on Cancer (IARC) - (IARC, 2000). Classified in Group D (not classifiable as a human carcinogen) by the US Environmental Protection Agency (EPA) - (US EPA file on-line 2014).

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

May cause respiratory irritationMay cause drowsiness or dizziness

STOT - REPEATED EXPOSURE

May cause damage to organs

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class Viscosity: >10 mm2/sec (DIN ISO Cup 3 mm)

SECTION 12. Ecological information

This product is dangerous for the environment and is toxic for aquatic organisms. In the long term, it have negative effects on acquatic environment.

12.1. Toxicity

XYLENE (MIXTURE OF

ISOMERS)

LC50 - for Fish > 4,2 mg/l/96h Oncorhynchus mykiss EC50 - for Crustacea > 2,93 mg/l/48h Daphnia Magna

ISOBUTYL ALCOHOL

LC50 - for Fish > 1,43 mg/l/96h Pimephales promelas

EC50 - for Crustacea > 1,1 mg/l/48h Daphnia pulex

BUTANOL

LC50 - for Fish > 1730 mg/l/96h PESCI (CAVEDANO AMERICANO)

EC50 - for Crustacea > 1983 mg/l/48h DAFNIA MAGNA

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3-AMINOPROPYLTRI-ETHOXYSILANO

LC50 - for Fish > 2208 mg/l/96h pesci

EC50 - for Crustacea > 331 mg/l/48h Daphnia magna

XYLENE (MIXTURE OF

ISOMERS)

LC50 - for Fish > 4,2 mg/l/96h Oncorhynchus mykiss EC50 - for Crustacea > 2,93 mg/l/48h Daphnia Magna

12.2. Persistence and degradability

XYLENE (MIXTURE OF

ISOMERS)

Solubility in water 100 - 1000 mg/l

Degradability: information not available

Rapidly degradable

ISOBUTYL ALCOHOL

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

ETHYLBENZENE

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

BUTANOL

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

4-METHYLPENTAN-2-ONE

Solubility in water > 10000 mg/l

Degradability: information not available

Rapidly degradable

XYLENE (MIXTURE OF

ISOMERS)

Solubility in water 100 - 1000 mg/l

Degradability: information not available

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12.3. Bioaccumulative potential

XYLENE (MIXTURE OF ISOMERS)	
Partition coefficient: n-	3,12
octanol/water BCF	25,9
ISOBUTYL ALCOHOL	
Partition coefficient: n-	1
octanol/water	
ETHYLBENZENE	
Partition coefficient: n-	3,6
octanol/water	
BUTANOL	
Partition coefficient: n-	1
octanol/water BCF	3,16
BOF	3,10
4-METHYLPENTAN-2-ONE	
Partition coefficient: n-	1,9
octanol/water	
XYLENE (MIXTURE OF	
ISOMERS)	
	0.40
Partition coefficient: n-octanol/water	3,12
Partition coefficient: n-	3,12 25,9
Partition coefficient: n- octanol/water BCF	•
Partition coefficient: n-octanol/water	•
Partition coefficient: n- octanol/water BCF	•
Partition coefficient: n- octanol/water BCF 12.4. Mobility in soil XYLENE (MIXTURE OF	•
Partition coefficient: n- octanol/water BCF 12.4. Mobility in soil XYLENE (MIXTURE OF ISOMERS)	25,9
Partition coefficient: n- octanol/water BCF 12.4. Mobility in soil XYLENE (MIXTURE OF	•
Partition coefficient: n- octanol/water BCF 12.4. Mobility in soil XYLENE (MIXTURE OF ISOMERS) Partition coefficient: soil/water	25,9
Partition coefficient: n- octanol/water BCF 12.4. Mobility in soil XYLENE (MIXTURE OF ISOMERS) Partition coefficient:	25,9
Partition coefficient: n- octanol/water BCF 12.4. Mobility in soil XYLENE (MIXTURE OF ISOMERS) Partition coefficient: soil/water ISOBUTYL ALCOHOL	25,9
Partition coefficient: n- octanol/water BCF 12.4. Mobility in soil XYLENE (MIXTURE OF ISOMERS) Partition coefficient: soil/water ISOBUTYL ALCOHOL Partition coefficient:	25,9
Partition coefficient: n- octanol/water BCF 12.4. Mobility in soil XYLENE (MIXTURE OF ISOMERS) Partition coefficient: soil/water ISOBUTYL ALCOHOL Partition coefficient: soil/water	25,9 2,73 0,31
Partition coefficient: n- octanol/water BCF 12.4. Mobility in soil XYLENE (MIXTURE OF ISOMERS) Partition coefficient: soil/water ISOBUTYL ALCOHOL Partition coefficient: soil/water BUTANOL	25,9
Partition coefficient: n- octanol/water BCF 12.4. Mobility in soil XYLENE (MIXTURE OF ISOMERS) Partition coefficient: soil/water ISOBUTYL ALCOHOL Partition coefficient: soil/water BUTANOL Partition coefficient: soil/water	25,9 2,73 0,31
Partition coefficient: n- octanol/water BCF 12.4. Mobility in soil XYLENE (MIXTURE OF ISOMERS) Partition coefficient: soil/water ISOBUTYL ALCOHOL Partition coefficient: soil/water BUTANOL Partition coefficient: soil/water 4-METHYLPENTAN-2-ONE	25,9 2,73 0,31 0,388
Partition coefficient: n- octanol/water BCF 12.4. Mobility in soil XYLENE (MIXTURE OF ISOMERS) Partition coefficient: soil/water ISOBUTYL ALCOHOL Partition coefficient: soil/water BUTANOL Partition coefficient: soil/water	25,9 2,73 0,31

XYLENE (MIXTURE OF

ISOMERS)

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Partition coefficient:

2,73

soil/water

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

12.6. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

14.1. UN number

ADR / RID, IMDG, 3470

IATA:

14.2. UN proper shipping name

ADR / RID: PAINT,

CORROSIVE, FLAMMABLE or PAINT RELATED MATERIAL, CORROSIVE, FLAMMABLE PAINT,

IMDG: PAINT, CORROSIVE,

FLAMMABLE or PAINT RELATED MATERIAL, CORROSIVE, FLAMMABLE (POLIAMMINOA

MMIDE) PAINT,

IATA: PAINT, CORROSIVE,

CORROSIVE, FLAMMABLE or PAINT RELATED MATERIAL, CORROSIVE, FLAMMABLE

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14.3. Transport hazard class(es)

ADR / RID: Class: 8 Label: 8 (3) IMDG: Class: 8 Label: 8 (3) Class: 8 Label: 8 (3) IATA:

14.4. Packing group

ADR / RID, IMDG, IATA:

П

14.5. Environmental hazards

ADR / RID: Environmentally

Hazardous

IMDG: Marine Pollutant

IATA:

For Air transport, environmentally hazardous mark is only mandatory for UN 3077 and UN 3082.

Pass.:

14.6. Special precautions for user

ADR / RID: HIN - Kemler: 83 Limited

Quantities: 1 restriction code: (D/E)

Special Provision: -

IMDG: EMS: F-E, S-C Limited

Quantities: 1

IATA: Maximum Cargo:

Packaging quantity: 30 L instructions:

855

Maximum quantity: 1 L

instructions:

851

Packaging

Tunnel

Special Instructions: A72, A192

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

Information not relevant

SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EC: P5c-E2

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product

Point 3 - 40

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Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage greater than 0,1%.

Substances subject to authorisarion (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

German regulation on the classification of substances hazardous to water (VwVwS 2005)

WGK 2: Hazard to waters

15.2. Chemical safety assessment

A chemical safety assessment has been performed for the following contained substances

XYLENE (MIXTURE OF ISOMERS)

4-METHYLPENTAN-2-ONE

ISOBUTYL ALCOHOL

XYLENE (MIXTURE OF ISOMERS)

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Flam. Liq. 2 Flammable liquid, category 2
Flam. Liq. 3 Flammable liquid, category 3
Acute Tox. 4 Acute toxicity, category 4
Asp. Tox. 1 Aspiration hazard, category 1

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STOT RE 2 Specific target organ toxicity - repeated exposure, category 2

Skin Corr. 1B Skin corrosion, category 1B

Eye Dam. 1 Serious eye damage, category 1

Eye Irrit. 2 Eye irritation, category 2
Skin Irrit. 2 Skin irritation, category 2

STOT SE 3 Specific target organ toxicity - single exposure, category 3

Skin Sens. 1Skin sensitization, category 1Skin Sens. 1ASkin sensitization, category 1ASkin Sens. 1BSkin sensitization, category 1B

Aquatic Chronic 2 Hazardous to the aquatic environment, chronic toxicity, category 2

Aquatic Chronic 3 Hazardous to the aquatic environment, chronic toxicity, category 3

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H332 Harmful if inhaled.

H304 May be fatal if swallowed and enters airways.

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

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.H319 Causes serious eye irritation.

H315 Causes skin irritation.

H335 May cause respiratory irritation.
 H317 May cause an allergic skin reaction.
 H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.H412 Harmful to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train

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- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

- 1. Regulation (EU) 1907/2006 (REACH) of the European Parliament
- 2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
- 3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
- 4. Regulation (EU) 2015/830 of the European Parliament
- 5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament 6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
- 7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
- 8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament 9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
- 10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
- 11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
- The Merck Index. 10th Edition
- Handling Chemical Safety
- INRS Fiche Toxicologique (toxicological sheet)
- Patty Industrial Hygiene and Toxicology
- N.I. Sax Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals Ministry of Health and ISS (Istituto Superiore di Sanità) Italy

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.