

Safety data sheet

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

1.1. Product identifier

Code: D_0004
Product name: GENERAL RAPID PRIMER

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

Intended use: Bituminous solvent primer for the building industry

Identified Uses	Industrial	Professional	Consumer
Primer	-	ERC: 8f PROC: 10, 11, 19, 5, 8a PC: 9a	-

1.3. Details of the supplier of the safety data sheet

Name: GENERAL MEMBRANE S.p.A.
Full address: Via Venezia, 28
District and Country: 30022 CEGGIA ITALIA VE
Tel. +39 0421 322000
Fax +39 0421 322800

e-mail address of the competent person responsible for the Safety Data Sheet: info@generalmembrane.it

Product distribution by: GENERAL MEMBRANE S.p.A.

1.4. Emergency telephone number

For urgent inquiries refer to: Tel. +39 0421 322000 in orario ufficio (08.30-12.30, 14.00:18.00) chiedere di Zanatta Mirco
E-Mail: zanatta.mirco@generalmembrane.it
Applicare le Misure di Primo Soccorso e le Misure Antincendio descritte.

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.

2.1.1. Regulation 1272/2008 (CLP) and following amendments and adjustments

Hazard classification and indication:

Flam. Liq. 2	H225
Repr. 2	H361d
Asp. Tox. 1	H304
STOT RE 2	H373
Eye Irrit. 2	H319
Skin Irrit. 2	H315
STOT SE 3	H336
Aquatic Chronic 3	H412

2.1.2. 67/548/EEC and 1999/45/EC Directives and following amendments and adjustments.

Danger Symbols: F-Xn

R phrases: 11-20/21-38-48/20-52/53-63-65-66

SECTION 2. Hazards identification ... / >>

Repr.Cat.3

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

2.2. Label elements

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

Hazard pictograms:



Signal words: Danger

Hazard statements:

H225	Highly flammable liquid and vapour.
H361d	Suspected of damaging the unborn child.
H304	May be fatal if swallowed and enters airways.
H373	May cause damage to organs through prolonged or repeated exposure.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements:

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P280	Wear protective gloves / protective clothing / eye protection / face protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P501	Dispose of contents / container in accordance with local regulations.

Contains: N-BUTYL ACETATE
TOLUENE
SOLVENT NAPHTA (PETROLEUM), LIGHT AROM

2.3. Other hazards

Information not available

SECTION 3. Composition/information on ingredients

3.1. Substances

Information not relevant

3.2. Mixtures

Compound containing: Mixture of bitumens, inert fillers, solvents, additives.

Contains:

Identification	Conc. %	Classification 67/548/EEC	Classification 1272/2008 (CLP)
XYLENE (MIXTURE OF ISOMERS)			
CAS 1330-20-7	10 - 25	R10, Xi R38, Xn R20/21	Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332,
EC 215-535-7			Skin Irrit. 2 H315, Nota C
INDEX 601-022-00-9			
Reg. no. 01-2119488216-32			

SECTION 3. Composition/information on ingredients ... / >>

TOLUENE

CAS 108-88-3 10 - 20 R67, F R11, Xi R38, Xn R48/20, Repr. Cat. 3 R63, Xn R65 Flam. Liq. 2 H225, Repr. 2 H361d, Asp. Tox. 1 H304, STOT RE 2 H373, Skin Irrit. 2 H315, STOT SE 3 H336
EC 203-625-9
INDEX 601-021-00-3
Reg. no. 01-2119471310-51

STYRENE

CAS 100-42-5 5 - 10 R10, Xi R36/38, Xn R20 Flam. Liq. 3 H226, Acute Tox. 4 H332, Eye Irrit. 2 H319, Skin Irrit. 2 H315, Nota D
EC 202-851-5
INDEX 601-026-00-0

SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM

EC 918-668-5 5 - 10 R10, R66, R67, N R51/53, Xi R37, Xn R65, Note P Flam. Liq. 3 H226, Asp. Tox. 1 H304, STOT SE 3 H335, STOT SE 3 H336, Aquatic Chronic 2 H411, Nota H P
Reg. no. 01-2119455851-35

N-BUTYL ACETATE

CAS 123-86-4 3 - 5 R10, R66, R67 Flam. Liq. 3 H226, STOT SE 3 H336
EC 204-658-1
INDEX 607-025-00-1
Reg. no. 01-2119485493-29

ETHYL ACETATE

CAS 141-78-6 0,2 - 3 R66, R67, F R11, Xi R36 Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336
EC 205-500-4
INDEX 607-022-00-5
Reg. no. 01-2119475103-46

4-METHYLPENTAN-2-ONE

CAS 108-10-1 0,2 - 3 R66, F R11, Xi R36/37, Xn R20 Flam. Liq. 2 H225, Acute Tox. 4 H332, Eye Irrit. 2 H319, STOT SE 3 H335
EC 203-550-1
INDEX 606-004-00-4
Reg. no. 01-2119473980-30

METHYL ETHYL KETONE

CAS 78-93-3 0,2 - 3 R66, R67, F R11, Xi R36 Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336
EC 201-159-0
INDEX 606-002-00-3

ACETONE

CAS 67-64-1 0,2 - 3 R66, R67, F R11, Xi R36 Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336
EC 200-662-2
INDEX 606-001-00-8
Reg. no. 01-2119471330-49

ETHYLBENZENE

CAS 100-41-4 0,2 - 3 F R11, Xn R20 Flam. Liq. 2 H225, Acute Tox. 4 H332
EC 202-849-4
INDEX 601-023-00-4

HEPTANE

CAS 142-82-5 1 - 2,5 R67, F R11, N R50/53, Xi R38, Xn R65 Flam. Liq. 2 H225, Asp. Tox. 1 H304, Skin Irrit. 2 H315, STOT SE 3 H336, Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1
EC 205-563-8
INDEX 601-008-00-2
Reg. no. 01-2119475515-33

N-HEXANE

CAS 110-54-3 1 - 2,5 R67, F R11, N R51/53, Xi R38, Xn R48/20, Repr. Cat. 3 R62, Xn R65 Flam. Liq. 2 H225, Repr. 2 H361f, Asp. Tox. 1 H304, STOT RE 2 H373, Skin Irrit. 2 H315, STOT SE 3 H336, Aquatic Chronic 2 H411
EC 203-777-6
INDEX 601-037-00-0

Xi= IRRITANT, Xn= HARMFUL, F= HIGHLY FLAMMABLE, N= DANGEROUS FOR THE ENVIRONMENT

Note: Upper limit is not included into the range

The full wording of the Risk (R) and 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 doctor.

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

For symptoms and effects caused by the contained substances, see chap. 11.

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

Information not available

SECTION 5. Firefighting measures

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

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

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.

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. Evaluate the compatibility of the container to be used, by checking section 10.

Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Check incompatibility for container material in section 7. 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): 3

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:
United Kingdom

Éire
OEL EU

TLV-ACGIH

EH40/2005 Workplace exposure limits. Containing the list of workplace exposure limits for use with the Control of Substances Hazardous to Health Regulations (as amended).
Code of Practice Chemical Agent Regulations 2011.
Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC.
ACGIH 2012

SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min					
		mg/m3	ppm	mg/m3	ppm				
TLW		100	19			SKIN			
Health - Derived no-effect level - DNEL / DMEL									
		Effects on consumers				Effects on workers			
Route of exposure		Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		VND	VND	VND	11	VND	VND	VND	VND
Inhalation		VND	VND	VND	32	VND	VND	VND	150
Skin		VND	VND	VND	11	VND	VND	VND	25
				mg/kg day	mg/kg day			mg/kg day	mg/kg day

XYLENE (MIXTURE OF ISOMERS)

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min					
		mg/m3	ppm	mg/m3	ppm				
WEL	UK		50		100	SKIN			
OEL	IRL		50		100	SKIN			
OEL	EU	221	50	442	100	SKIN			
TLV-ACGIH		434		651		SKIN			

SECTION 8. Exposure controls/personal protection ... / >>

HEPTANE

Threshold Limit Value

Type	Country	TWA/8h mg/m3	ppm	STEL/15min mg/m3	ppm	
WEL	UK		500			SKIN
OEL	IRL		400			SKIN
OEL	EU	2085				SKIN
TLV-ACGIH		1640		2050		SKIN

TOLUENE

Threshold Limit Value

Type	Country	TWA/8h mg/m3	ppm	STEL/15min mg/m3	ppm	
WEL	UK		50		150	SKIN
OEL	IRL		50		150	SKIN
OEL	EU	192	50	384	100	SKIN
TLV-ACGIH		188				SKIN

ETHYLBENZENE

Threshold Limit Value

Type	Country	TWA/8h mg/m3	ppm	STEL/15min mg/m3	ppm	
WEL	UK		100		125	SKIN
OEL	IRL		100		125	SKIN
OEL	EU	442	100	884	200	SKIN
TLV-ACGIH		87	20			
TLV-ACGIH		434		543		SKIN

STYRENE

Threshold Limit Value

Type	Country	TWA/8h mg/m3	ppm	STEL/15min mg/m3	ppm	
WEL	UK		100		250	SKIN
OEL	IRL		20		40	SKIN
TLV-ACGIH		85		170		SKIN

N-HEXANE

Threshold Limit Value

Type	Country	TWA/8h mg/m3	ppm	STEL/15min mg/m3	ppm	
WEL	UK		20			SKIN
OEL	IRL		20			SKIN
OEL	EU	72	20			SKIN
TLV-ACGIH		176				SKIN

ACETONE

Threshold Limit Value

Type	Country	TWA/8h mg/m3	ppm	STEL/15min mg/m3	ppm	
WEL	UK		500		1500	
OEL	IRL		500			
OEL	EU	1210	500			
TLV-ACGIH		1188		1782		

METHYL ETHYL KETONE

Threshold Limit Value

Type	Country	TWA/8h mg/m3	ppm	STEL/15min mg/m3	ppm	
WEL	UK		200		300	
OEL	IRL		200		300	
OEL	EU	600	200	900	300	
TLV-ACGIH		590		885		

SECTION 8. Exposure controls/personal protection ... / >>

4-METHYLPENTAN-2-ONE

Threshold Limit Value

Type	Country	TWA/8h mg/m3	ppm	STEL/15min mg/m3	ppm
WEL	UK		50		100
OEL	IRL		20		50
OEL	EU	83	20	208	50
TLV-ACGIH		205		307	

ETHYL ACETATE

Threshold Limit Value

Type	Country	TWA/8h mg/m3	ppm	STEL/15min mg/m3	ppm
WEL	UK		200		400
OEL	IRL		400		
TLV-ACGIH		1440			

N-BUTYL ACETATE

Threshold Limit Value

Type	Country	TWA/8h mg/m3	ppm	STEL/15min mg/m3	ppm
WEL	UK		150		200
OEL	IRL		150		200
TLV-ACGIH		713		950	

(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.

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, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (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	Black
Odour	Not available
Odour threshold	Not available
pH	Not available
Melting point / freezing point	Not available
Initial boiling point	80 °C
Boiling range	Not available
Flash point	< 21 °C
Evaporation Rate	Not available
Flammability (solid, gas)	Not available
Lower inflammability limit	Not available
Upper inflammability limit	Not available
Lower explosive limit	Not available
Upper explosive limit	Not available
Vapour pressure	Not available
Vapour density	Not available
Relative density	0,930 kg/l 20°C +/-0,030
Solubility	Insoluble in water
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Explosive properties	Not available
Oxidising properties	Not available

9.2. Other information

VOC (Directive 2004/42/EC) :	60,93% - 566,64	g/litre
VOC (volatile carbon) :	50,70% - 471,51	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.

TOLUENE: breaks down in sunlight.

STYRENE: polymerises readily above 65°C with risk of fire and explosion; added with an inhibitor that requires a small amount of dissolved oxygen at temperatures <25°C.

ACETONE: decomposes under the effect of heat.

BUTANONE: reacts with light metals like aluminium, and with strong oxidising agents; attacks various types of plastic. Decomposes under the effect of heat.

4-METHYLPENTAN-2-ONE: reacts violently with light metals, such as aluminium; attacks different types of plastic.

ETHYL ACETATE: decomposes slowly into acetic acid and ethanol under the effect of light, air and water.

N-BUTYL ACETATE: decomposes readily with water, especially when warm.

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): 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.

TOLUENE: risk of explosion on contact with fuming sulphuric acid, nitric acid, silver perchlorates, nitrogen dioxide, non-metal halogenides, acetic acid, organic nitrocompounds. Can form explosive mixtures with the air. May react dangerously with: strong oxidising agents, strong acids, sulphur (in the presence of heat).

ETHYLBENZENE: reacts violently with strong oxidising agents and attacks various types of plastics. Can form explosive mixtures with the air.

STYRENE: can react dangerously with peroxides and strong acids. May polymerise on contact with: aluminium trichloride, azobisisobutyronitrile, dibenzoyl peroxide, sodium. Risk of explosion on contact with: butyllithium, chlorosulphuric acid, di-tert-butyl peroxide, oxidising agents, oxygen.

ACETONE: risk of explosion on contact with: bromine trifluoride, difluoro dioxide, hydrogen peroxide, nitrosyl chloride, 2-methyl-1,3 butadiene, nitromethane, nitrosyl perchlorate. Can react dangerously with: potassium tert-butoxide, alkaline hydroxides, bromine, bromoform, isoprene, sodium, sulphur dioxide, chromium trioxide, chromyl chloride, nitric acid, chloroform, peroxymonosulphuric acid, phosphoryl chloride, chromosulphuric acid, fluorine, strong oxidising agents. Develops flammable gases with nitrosyl perchlorate.

SECTION 10. Stability and reactivity ... / >>

BUTANONE: may generate peroxides on contact with air, light or oxidising agents. Risk of explosion on contact with: hydrogen peroxide and sulphuric acid. It may react dangerously with: oxidising agents, trichloromethane, alkalis. Forms explosive mixtures with the air.

4-METHYLPENTAN-2-ONE: can react violently with oxidising agents. In the presence of air it forms peroxides. Forms explosive mixtures with air when hot.

ETHYL ACETATE: risk of explosion on contact with: metals, alkalis, hydrides, oleum. can react violently with: fluoride, strong oxidising agents, chlorosulfuric acid, potassium tert-butoxide. Forms explosive mixtures with the air.

N-BUTYL ACETATE: risk of explosion on contact with: strong oxidising agents. Can react dangerously with alkaline hydroxides, potassium tert-butoxide. Forms explosive mixtures with the air.

10.4. Conditions to avoid

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

ACETONE: avoid exposure to sources of heat and naked flames.

BUTANONE: avoid exposure to sources of heat.

4-METHYLPENTAN-2-ONE: avoid exposure to sources of heat.

ETHYL ACETATE: avoid exposure to light, sources of heat and naked flames.

N-BUTYL ACETATE: avoid exposure to moisture, sources of heat and naked flames.

10.5. Incompatible materials

STYRENE: avoid oxidising agents, copper and strong acids; it dissolves various types of plastic materials, but not polychloroprene and polyvinyl alcohol.

ACETONE: acid and oxidising substances.

BUTANONE: strong oxidising agents, inorganic acids, ammonia, copper and chloroform.

4-METHYLPENTAN-2-ONE: oxidising substances, reducing substances.

ETHYL ACETATE: acids and bases, strong oxidising agents; aluminium and some plastics, nitrates and chlorosulphuric acid.

N-BUTYL ACETATE: water, nitrates, strong oxidising agents, acids and alkalis and potassium tert-butoxide.

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: methane, styrene, hydrogen, ethane.

ACETONE: ketenes and other irritating compounds.

SECTION 11. Toxicological information

11.1. Information on toxicological effects

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.

This product must be handled carefully because of its possible teratogenic effects, which may be toxic and damage the foetus development.

The introduction of even small quantities of this liquid into the respiratory system in case of ingestion or vomit may cause bronchopneumonia and pulmonary edema.

This product may cause functional disorders or morphological mutations after repeated or prolonged exposure and/or may accumulate inside the human body and is thus graded as dangerous.

Acute effects: stinging eyes. Symptoms may include: rubescence, edema, pain and lachrymation.

Vapour inhalation may moderately irritate the upper respiratory tract. Contact with skin may cause slight irritation.

Ingestion may cause health problems, including stomach pain and sting, nausea and sickness.

Acute effects: contact with skin may cause: irritation, erythema, edema, dryness and chapped skin. Vapour inhalation may slightly irritate the upper respiratory tract. Ingestion may cause health disorders, including stomach pain and sting, nausea and sickness.

This product contains highly volatile substances, which may cause serious depression of the central nervous system (CNS) and have negative effects, such as drowsiness, dizziness, slow reflexes, narcosis.

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

TOLUENE: it has a toxic effect on the central and peripheral nervous system (with encephalopathies and polyneuritis). Irritating to the skin, conjunctivae, cornea and respiratory apparatus.

ETHYLBENZENE: like the benzene homologues, may exert an effect on the CNS with depression, narcosis, often preceded by dizziness and accompanied by headache. It is irritating to the skin, conjunctivae and respiratory apparatus.

STYRENE: Acute toxicity following inhalation at 1000 ppm involves the central nervous system with headache and dizziness, lack of coordination; irritation of the mucous membranes of the eyes and respiratory tract occurs at 500 ppm concentrations. Chronic exposure produces depression of the Central and peripheral nervous system with loss of memory, headache and somnolence starting at 20 ppm; digestive disorders with nausea and loss of appetite; irritation of the respiratory tract with chronic bronchitis and dermatosis.

N-HEXANE: the chronic toxic effect involves the peripheral and central nervous system; this is also affected by an acute effect. Irritating effect is observed on the respiratory apparatus, conjunctivae and skin.

N-BUTYL ACETATE: in humans the substance's vapours cause irritation to the eyes and nose. In the event of repeated exposure, there is skin irritation, dermatosis (with dryness and flaking of the skin) and keratitis.

SECTION 11. Toxicological information ... / >>

XYLENE (MIXTURE OF ISOMERS)

LD50 (Oral)	3.523 mg/kg Rat
LD50 (Dermal)	4.350 mg/kg Rabbit
LC50 (Inhalation)	26 mg/l/4h Rat

TOLUENE

LD50 (Oral)	5.580 mg/kg Rat
LD50 (Dermal)	12.124 mg/kg Rabbit
LC50 (Inhalation)	28,1 mg/l/4h Rat

ETHYLBENZENE

LD50 (Oral)	3.500 mg/kg Rat
LD50 (Dermal)	15.354 mg/kg Rabbit
LC50 (Inhalation)	17,2 mg/l/4h Rat

STYRENE

LD50 (Oral)	5.000 mg/kg Rat
LC50 (Inhalation)	11,8 mg/l/4h Rat

N-HEXANE

LD50 (Oral)	5.000 mg/kg Rat
LD50 (Dermal)	3.000 mg/kg Rabbit

METHYL ETHYL KETONE

LD50 (Oral)	2.737 mg/kg Rat
LD50 (Dermal)	6.480 mg/kg Rabbit
LC50 (Inhalation)	23,5 mg/l/8h Rat

4-METHYLPENTAN-2-ONE

LD50 (Oral)	2.080 mg/kg Rat
LD50 (Dermal)	>16.000 mg/kg Rabbit
LC50 (Inhalation)	>8,2 mg/l/4h Rat

N-BUTYL ACETATE

LD50 (Oral)	>6.400 mg/kg Rat
LD50 (Dermal)	>5.000 mg/kg Rabbit
LC50 (Inhalation)	21,1 mg/l/4h Rat

SECTION 12. Ecological information

12.1. Toxicity

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

HEPTANE

LC50 - for Fish	375 mg/l Tilapia mossambica
EC50 - for Crustacea	82,5 mg/l Daphnia magna
EC50 - for Algae / Aquatic Plants	1,5 mg/l Algae

12.2. Persistence and degradability

The paraffinic hydrocarbons fraction may be considered biodegradable in water and in air. They distribute mostly in the air. The small non biodegradable amount which spreads into water tends to accumulate in fish.

STYRENE: easily biodegradable.

12.3. Bioaccumulative potential

HEPTANE: moderate bioaccumulation potential (log Ko/w>3).

STYRENE: no appreciable bioaccumulation potential (log Ko/w 1-3).

12.4. Mobility in soil

HEPTANE: slightly mobile in soil.

STYRENE: slightly mobile in soil.

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.
Avoid littering. Do not contaminate soil, sewers and waterways.
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

These goods must be transported by vehicles authorized to the carriage of dangerous goods according to the provisions set out in the current edition of the Code of International Carriage of Dangerous Goods by Road (ADR) and in all the applicable national regulations.
These goods must be packed in their original packagings or in packagings made of materials resistant to their content and not reacting dangerously with it. People loading and unloading dangerous goods must be trained on all the risks deriving from these substances and on all actions that must be taken in case of emergency situations.

Road and rail transport:

ADR/RID Class:	3	UN:	1263
Packing Group:	II		
Label:	3		
Nr. Kemler:	33		
Special Provision:	640D		
Limited Quantity	5 L		
Tunnel restriction code	D/E		
Proper Shipping Name:	Paint		



Carriage by sea (shipping):

IMO Class:	3	UN:	1263
Packing Group:	II		
Label:	3		
EMS:	F-E, <u>S-E</u>		
Marine Pollutant	NO		
Proper Shipping Name:	Paint		



Transport by air:

IATA:	3	UN:	1263
Packing Group:	II		
Label:	3		
Cargo:			
Packaging instructions:	364	Maximum quantity:	60 L
Pass.:			
Packaging instructions:	353	Maximum quantity:	5 L
Proper Shipping Name:	Paint		



SECTION 15. Regulatory information

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

Seveso category
7b

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

<u>Product</u>	
Point	3-40
<u>Contained substance</u>	
Point	48 TOLUENE

Substances in Candidate List (Art. 59 REACH)
None

Substances subject to authorisation (Annex XIV REACH)
None

SECTION 15. Regulatory information ... / >>

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.

VOC (Directive 2004/42/EC) :

Binding primers.

VOC given in g/litre of product in a ready-to-use condition :

Limit value: 750 (2010)

VOC of product : 600,00

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

WGK 2: Hazard to waters

15.2. Chemical safety assessment

No chemical safety assessment has been processed for the mixture and the substances it contains.

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
Repr. 2	Reproductive toxicity, category 2
Acute Tox. 4	Acute toxicity, category 4
Asp. Tox. 1	Aspiration hazard, category 1
STOT RE 2	Specific target organ toxicity - repeated exposure, category 2
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
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic toxicity, category 1
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.
H361d	Suspected of damaging the unborn child.
H361f	Suspected of damaging fertility.
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.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
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.
H412	Harmful to aquatic life with long lasting effects.

Text of risk (R) phrases mentioned in section 2-3 of the sheet:

Repr.Cat. 3	Reproductive toxicity, fertility, category 3
Repr.Cat. 3	Reproductive toxicity, development, category 3
R10	FLAMMABLE.
R11	HIGHLY FLAMMABLE.
R20	HARMFUL BY INHALATION.
R20/21	HARMFUL BY INHALATION AND IN CONTACT WITH SKIN.
R36	IRRITATING TO EYES.
R36/37	IRRITATING TO EYES AND RESPIRATORY SYSTEM.

SECTION 16. Other information ... / >>

R36/38	IRRITATING TO EYES AND SKIN.
R37	IRRITATING TO RESPIRATORY SYSTEM.
R38	IRRITATING TO SKIN.
R48/20	HARMFUL: DANGER OF SERIOUS DAMAGE TO HEALTH BY PROLONGED EXPOSURE THROUGH INHALATION.
R50/53	VERY TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.
R51/53	TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.
R52/53	HARMFUL TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.
R62	POSSIBLE RISK OF IMPAIRED FERTILITY.
R63	POSSIBLE RISK OF HARM TO THE UNBORN CHILD.
R65	HARMFUL: MAY CAUSE LUNG DAMAGE IF SWALLOWED.
R66	REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING.
R67	VAPOURS MAY CAUSE DROWSINESS AND DIZZINESS.

Use descriptor system:

ERC8f	Wide dispersive outdoor use resulting in inclusion into or onto a matrix
PC9a	Coatings and paints, thinners, paint removers
PROC10	Roller application or brushing
PROC11	Non industrial spraying
PROC19	Hand-mixing with intimate contact and only PPE available
PROC5	Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)
PROC8a	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities

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
- 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. Directive 1999/45/EC and following amendments
2. Directive 67/548/EEC and following amendments and adjustments
3. Regulation (EC) 1907/2006 (REACH) of the European Parliament
4. Regulation (EC) 1272/2008 (CLP) of the European Parliament
5. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament

SECTION 16. Other information ... / >>

6. Regulation (EC) 453/2010 of the European Parliament
7. Regulation (EC) 286/2011 (II Atp. CLP) of the European Parliament
8. Regulation (EC) 618/2012 (III Atp. CLP) of the European Parliament
9. The Merck Index. - 10th Edition
10. Handling Chemical Safety
11. Niosh - Registry of Toxic Effects of Chemical Substances
12. INRS - Fiche Toxicologique (toxicological sheet)
13. Patty - Industrial Hygiene and Toxicology
14. N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
15. ECHA website

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.

Changes to previous review:

The following sections were modified:

01/02/03/04/05/06/07/08/09/10/11/12/13/14/15/16