

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1	Product Name:	GENERAL RAPID PRIMER - BUILDING BITUMINOUS PRIMER SOLVENT BASED
1.2	Manufacturer:	GENERAL MEMBRANE Spa
1.2.1	Production plant:	Via Venezia 28, 30022 CEGGIA (Venezia) ITALY T. +390421322000, F. +390421322800, e-mail: export@generalmembrane.it
1.3	In case of emergency:	telephone: +39 0421 322000 ask to Zanatta Mirco (only office time: 08.30-12.30, 14.00-18.00) mail: zanatta.mirco@generalmembrane.it Apply the First Aid and Fire regulations described below.

2. HAZARD IDENTIFICATION

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in Directives 67/548/EEC and 1999/45/EC and/or 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.

Danger Symbols: F-Xn

R phrases: 11-20/21-36/38-48/20-52/53-63-65

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

2.2. Label elements

Hazard labeling under the 67/548/EEC and 1999/45/EC directives and following amendments and adjustments.



- R11** highly flammable.
- R20/21** harmful by inhalation and in contact with skin.
- R36/38** irritating to eyes and skin.
- R48/20** harmful: danger of serious damage to health by prolonged exposure through inhalation.
- R52/53** harmful to aquatic organisms, may cause long-term adverse effects in the aquatic Environment.
- R63** possible risk of harm to the unborn child.
- R65** harmful: may cause lung damage if swallowed.
- S2** keep out of the reach of children.
- S9** keep container in a well-ventilated place.
- S13** keep away from food, drink and animal feedingstuffs.
- S16** keep away from sources of ignition - no smoking.
- S36/37** wear suitable protective clothing and gloves.
- S46** if swallowed, seek medical advice immediately and show this container or label.

Contains: XYLENE (MIXTURE OF ISOMERS), TOLUENE

2.3. Other hazards

Information not available

3. INFORMATION ON INGREDIENTS

3.1. Substances

Information not relevant

3.2. Mixtures

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

Denominazione della Sostanza	Concentrazione % (C)	Classificazione 67/648/CEE	Classificazione 1272/2008 CLP
SOLVENT NAPHTA (PETROLEUM), LIGHT AROM Numero C.A.S. 64742-95-6 Numero CE 265-199-0 Numero INDEX 649-356-00-4	5,00<= C <10,00	Xn R65 Xi R37 R10 R66 R67 N R51/53 Nota H P 4	Flam. Liq. 3 H226, Asp. Tox. 1 H304, STOT SE 3 H335, STOT SE 3 H336, Aquatic Chronic 2 H411, EUH066, Nota H P

Denominazione della Sostanza	Concentrazione % (C)	Classificazione 67/648/CEE	Classificazione 1272/2008 CLP
XILENE (MIXTURE OF ISOMERS) Numero C.A.S. 1330-20-7 Numero CE 215-535-7 Numero INDEX 601-022-00-	12,50<= C <20,00	Xn R20/21 Xi R38 R10 Nota C	Flam. Liq. 3 H226, Acute Tox. 4 H312, CE 215-535-7 Skin Irrit. 2 H315, Acute Tox. 4 H332, Nota C
ISOBUTIL ALCOHOL Numero C.A.S. 78-83-1 Numero CE 201-148-0 Numero INDEX 603-108-00-1	3,00<= C <5,00	Xi R37/38 Xi R41 R10 R67 Nota 6	Flam. Liq. 3 H226, Skin Irrit. 2 H315, Eye Dam. 1 H318, STOT SE 3 H335, STOT SE 3 H336
HEPTANE Numero C.A.S. 142-82-5 Numero CE 205-563-8 Numero INDEX 601-008-00-2	0,00<= C <0,20	Xn R65 Xi R38 R67 F R11 N R50/53 Nota C 46	Flam. Liq. 2 H225, Asp. Tox. 1 H304, Skin Irrit. 2 H315, STOT SE 3 H336, Aquatic Acute 1 H400, Aquatic Chronic 1 H410, Nota C
TOLUENE Numero C.A.S. 108-88-3 Numero CE 203-625-9 Numero INDEX 601-021-00-3	0,20<= C <3,00	Xn R48/20 Xn R63 Xn R65 Xi R38 R67 F R11 Repr. Cat. 3 Nota 4 6	Flam. Liq. 2 H225, Asp. Tox. 1 H304, Skin Irrit. 2 H315, STOT SE 3 H336, Repr. 2 H361d, STOT RE 2 H373
N-HEXAN Numero C.A.S. 110-54-3 Numero CE 203-777-6 Numero INDEX 601-037-00-0	0,20<= C <2,50	Xn R48/20 Xn R62 Xn R65 Xi R38 R67 F R11 N R51/53 Repr. Cat. 3 Nota 4 6	Flam. Liq. 2 H225, Asp. Tox. 1 H304, Skin Irrit. 2 H315, STOT SE 3 H336, Repr. 2 H361f, STOT RE 2 H373, Aquatic Chronic 2 H411
1,2-DICHLOROPROPANE Numero C.A.S. 78-87-5 Numero CE 201-152-2 Numero INDEX 602-020-00-0	0,20<= C <3,00	Xn R20/22 F R11	Flam. Liq. 2 H225, Acute Tox. 4 H302, Acute Tox. 4 H332
PROPAN-2-OL Numero C.A.S. 67-63-0 Numero CE 200-661-7 Numero INDEX 603-117-00-0	3,00<= C <5,00	Xi R36 R67 F R11 Nota 6	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336
ACETONE Numero C.A.S. 67-64-1 Numero CE 200-662-2 Numero INDEX 606-001-00-8	0,20<= C <3,00	Xi R36 R66 R67 F R11 Nota 6	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066
BUTANONE Numero C.A.S. 78-93-3 Numero CE 201-159-0 Numero INDEX 606-002-00-3	0,20<= C <3,00	Xi R36 R66 R67 F R11 Nota 6	EUH066, Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336
4-METHYLPENTAN-2-ONE Numero C.A.S. 108-10-1 Numero CE 203-550-1 Numero INDEX 606-004-00-4	0,20<= C <3,00	Xn R20 Xi R36/37 R66 F R11	EUH066, Flam. Liq. 2 H225, Eye Irrit. 2 H319, Acute Tox. 4 H332, STOT SE 3 H335

Denominazione della Sostanza	Concentrazione % (C)	Classificazione 67/648/CEE	Classificazione 1272/2008 CLP
ETHYL ACETATE Numero C.A.S. 141-78-6 Numero CE 205-500-4 Numero INDEX 607-022-00-5	0,20<= C <3,00	Xi R36 R66 R67 F R11 Nota 6	EUH066, Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336
N-BUTYL ACETATE Numero C.A.S. 123-86-4 Numero CE 204-658-1 Numero INDEX 607-025-00-1	5,00<= C <10,00	R66 R67 R10	EUH066, Flam. Liq. 3 H226, STOT SE 3 H336

Xn= HARMFUL, Xi= IRRITANT, N= DANGEROUS FOR THE ENVIRONMENT, F= HIGHLY FLAMMABLE
The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet

4. FIRST AID MEASURES

4.1. Description of first aid measures

EYES: Irrigate copiously with clean, fresh water for at least 15 minutes. Seek medical advice.

SKIN: Wash immediately with plenty of water. Remove contaminated clothing. If irritation persists, seek medical attention. Wash contaminated clothing before using them again.

INHALATION: Remove to open air. If breathing is irregular, seek medical advice.

INGESTION: Obtain immediate medical attention. Induce vomiting only if indicated by the doctor.

Never give anything by mouth to an unconscious person.

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

Follow doctor's orders

5. FIREFIGHTING MEASURES

5.1. Extinguishing media

SUITABLE EXTINGUISHING MEDIA

The extinction equipment should contain carbon dioxide, foam or chemical powders. For product leaks and spills that have not caught fire, nebulised water can be used to dispel flammable fumes and protect the individuals taking part in stemming the leak.

EXTINGUISHING MEDIA WHICH SHALL NOT BE USED FOR SAFETY REASONS

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 (carbon oxide, toxic pyrolysis products, etc).

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 and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS: Hardhat with visor, fireproof clothing (fireproof jacket and trousers with ties around arms, legs and waist) work gloves (fireproof, cut proof and dielectric), self-respirator (self-protector).

6. MEASURES IN CASE OF ACCIDENTAL SPILLAGE/RELEASE

6.1. Personal precautions, protective equipment and emergency procedures

Eliminate sources of ignition (cigarettes, flames, sparks, etc.) from the air in which the leak occurred. If there are no contraindications, spray solid products with water to prevent the formation of dust. Use breathing equipment if fumes or powders are released into the air. Block the leakage if there is no hazard. Do not handle damaged containers or leaked product before donning appropriate protective gear. Send away individuals who are not suitably equipped. For information on risks for the environmental and health, respiratory tract protection, ventilation and personal protection equipment, refer to the other sections of this sheet.

6.2. Environmental precautions

The product must not penetrate the sewers, surface water, ground water and neighbouring areas.

6.3. Methods and material for containment and cleaning up

For liquid products, suck into a suitable container (made of material not incompatible with the product) and soak up any leaked product with absorbent inert material (sand, vermiculite, diatomaceous earth, Kieselguhr, etc). Collect the majority of the remaining material and deposit in containers for disposal. For solid products, use spark proof mechanical tools to collect the leaked product and place in plastic containers. If there are no contraindications, use jets of water to eliminate product residues. 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.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid the accumulation of electrostatic charges. Vapours may ignite with explosion, it is therefore necessary to avoid accumulation keeping the windows and doors open, ensuring crossventilation. Without adequate ventilation, the vapours may accumulate at the bottom and ignite at a distance, if triggered off, with the risk of flashback. Keep far away from sources of heat, sparks and bright flames. Do not smoke, use matches or lighters. Keep the containers earthed while decanting and wear antistatic boots.

Vigorous stirring and flow through the pipings and equipment may cause the formation and accumulation of electrostatic charges due to the low conductivity of the product. In order to avoid the risk of fire outbreak and explosion never use compressed air during movement.

7.2. Conditions for safe storage, including any incompatibilities

Store the containers sealed and in a well ventilated place.

7.3. Specific end use(s):

Information not available.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Controls parameters:

Nome		TWA (8h)	STEL (15 min)	
Solvent Naphta (Petroleum), Light Arom	TLw	100 mg/m ³ , 19 ppm		Skin
Xylene (mixture of isomers)	TLV-ACGIH	100 ppm	150 ppm	Skin
	OEL (EU)	221 mg/m ³ , 50 ppm	442 mg/m ³ , 100 ppm	Skin
	OEL (IRL)	50 ppm	100 ppm	Skin
	WEL (UK)	50 ppm	100 ppm	Skin
Isobutyl alcohol	TLV-ACGIH	50 ppm		Skin
	OEL (IRL)	50 ppm	75 ppm	Skin
	WEL (UK)	50 ppm	75 ppm	Skin
Heptane	TLV-ACGIH	400 ppm	500 ppm	Skin
	OEL (EU)	2085 mg/m ³ , 500 ppm		Skin
	OEL (IRL)	400 ppm		Skin
	WEL (UK)	500 ppm		Skin
Toluene	TLV-ACGIH	20 ppm		Skin
	OEL (EU)	192 mg/m ³ , 50 ppm	384 mg/m ³ , 100 ppm	Skin
	OEL (IRL)	50 ppm	150 ppm	Skin
	WEL (UK)	50 ppm	150 ppm	Skin
N-Hexane	TLV-ACGIH	50 ppm		Skin
	OEL (EU)	72 mg/m ³ , 20 ppm		Skin
	OEL (IRL)	20 ppm		Skin
	WEL (UK)	20 ppm		Skin
1,2-Dichloropropane	TLV-ACGIH	10 ppm		
	OEL (IRL)	75 ppm	110 ppm	
Propan-2-ol	TLV-ACGIH	200 ppm	400 ppm	Skin
	OEL (IRL)	400 ppm	500 ppm	Skin
	WEL (UK)	400 ppm	500 ppm	Skin

Nome		TWA (8h)	STEL (15 min)	
Acetone	TLV-ACGIH	500 ppm	750 ppm	
	OEL (EU)	1210 mg/m ³ , 500 ppm		
	OEL (IRL)	500 ppm	500 ppm	
	WEL (UK)	500 ppm	1500 ppm	
Butanone	TLV-ACGIH	200 ppm	300 ppm	Skin
	OEL (EU)	600 mg/m ³ 200 ppm	900 mg/m ³ 300 ppm	Skin
	OEL (IRL)	200 ppm	300 ppm	Skin
	WEL (UK)	200 ppm	300 ppm	Skin
4-Methylpentan-2-one	TLV-ACGIH	50 ppm	75 ppm	Skin
	OEL (EU)	83 mg/m ³ , 20 ppm	208 mg/m ³ , 50 ppm	Skin
	OEL (IRL)	20 ppm	50 ppm	Skin
	WEL (UK)	50 ppm	100 ppm	Skin
Ethyl acetate	TLV-ACGIH	400 ppm		
	OEL (IRL)	400 ppm		
	WEL (UK)	200 ppm	400 ppm	
N-Butyl acetate	TLV-ACGIH	150 ppm	200 ppm	
	OEL (IRL)	150 ppm	200 ppm	
	WEL (UK)	150 ppm	200 ppm	

8.2 Exposures control

As the use of adequate technical equipment must always take priority over personal protection equipment, make sure that the workplace is well aired through effective local aspiration or bad air vent. If such operations do not make it possible to keep the concentration of the product below the permitted workplace exposure thresholds a suitable respiratory tract protection must be used. See product label for hazard details during use. Ask your chemical substance suppliers for advice when choosing personal protection equipment. Personal protection equipment must comply with the rules in force indicated below.

HAND PROTECTION

Protect hands with category II (ref. Directive 89/686/EEC and standard EN 374) work gloves, such as those in PVC, neoprene, nitril or equivalent. The following should be considered when choosing work glove material: degradation, breakage times and permeation. Work glove resistance to preparations should be checked before use, as it can be unpredictable. Gloves' limit depends on the duration of exposure.

EYE PROTECTION

Wear protective airtight goggles (ref. standard EN 166).

SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (ref. Directive 89/686/CEE and standard EN 344). Wash body with soap and water after removing overalls.

RESPIRATORY PROTECTION

If the threshold value for one or more of the substances present in the preparation for daily exposure in the workplace or to a fraction established by the company's prevention and protection service is exceeded, wear a mask with an A or universal filter, the class (1, 2 or 3) of which must be chosen according to the limit concentration of use (ref. standard EN 141).

The use of breathing protection equipment, such as masks with organic vapour and dust/mist cartridges, is necessary in the absence of technical measures limiting worker exposure. The protection provided by masks is in any case limited.

If the substance in question is odourless or its olfactory threshold is higher than the relative exposure limit and in the event of an emergency, or when exposure levels are unknown or the concentration of oxygen in the workplace is less than 17% volume, wear self-contained, open-circuit compressed air breathing apparatus (ref. standard EN 137) or fresh air hose breathing apparatus for use with full face mask, half mask or mouthpiece (ref. standard EN 138).

An emergency eye washing and shower system must be provided. The product must be used in a closed cycle, in well-aired environments fitted with strong localised aspiration systems (capture speed > 1.5 m/s), otherwise it is compulsory to use the personal protection equipment indicated and always in well-aired environments fitted with strong localised aspiration systems (capture speed > 1.5 m/s).

In the presence of risks of exposure to splashes or squirts during work, adequate mouth, nose and eye protection should be used to prevent accidental absorption. In the event of prolonged worker exposure, verify the possibility of operating in a closed circuit or of reorganising the work cycle to avoid repetitive exposure; make sure the PPE used is as efficient as possible.

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 or freezing point: Not available
Boiling point: 80 °C
Distillation range: Not available
Flash point: < 21 °C
Evaporation rate: Not available
Flammability of solids and gases: 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
Specific Gravity: 1,000 Kg/l +/- 0,100
Solubility: Insoluble in water
Partition coefficient (n-octanol/water): Not available
Ignition temperature: Not available
Decomposition temperature: Not available
Viscosity: Not available
Reactive properties: Not available

9.2. Other information

VOC (Directive 2004/42/CE): 59,86% - 598,60 g/litre of preparation
VOC (volatil carbon): 46,40% - 464,00 g/litre of preparation

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.

1,2-DICHLOROPROPANE: decomposes on contact with flames or red hot surfaces.

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).

1,2-DICHLOROPROPANE: risk of explosion on contact with: aluminium and metal powders. It may react dangerously with: alkaline metals, alkaline earth metals, sodium amides. Forms explosive mixtures with the air.

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.

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, electrostatic discharge and 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

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, vapours potentially dangerous to health may be released.

1,2-DICHLOROPROPANE: hydrochloric acid.

ACETONE: ketenes and other irritating compounds.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute effects: inhalation and cutaneous absorption of this product are harmful. This product may irritate mucosae, the upper respiratory tract, and eyes. Exposure symptoms may include: stinging and irritated eyes, mouth, nose, throat; cough, respiratory disorders, dizziness, headache, nausea and sickness.

In the most serious cases, inhalation of this product may cause larynx and bronchial tube edema and irritation, chemical pneumonia and pulmonary edema. Upon contact with skin, this product may irritate it, causing an increase in skin temperature, swelling and itchiness. Ingestion of even small amounts of this product may cause health problems (stomach pain, nausea, sickness, diarrhoea).

This product may cause functional disorders or morphological mutations after repeated or prolonged exposure by inhalation of a quantity of 0.25 mg/l/6h/day or lower.

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.

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.

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.

XYLENE (MIXTURE OF ISOMERS)

LC50 (Inhalation): 6350,000 ppm/4h Rat

LD50 (Oral): 3523,000 mg/kg Rat

LD50 (Dermal): 4350,000 mg/kg Rabbit

ISOBUTYL ALCOHOL

LC50 (Inhalation): 19,200 mg/l/4h Rat

LD50 (Oral): 2460,000 mg/kg Rat

LD50 (Dermal): 2460,000 mg/kg Rabbit

TOLUENE

LC50 (Inhalation): 28,100 mg/l/4h Rat

LD50 (Oral): 5580,000 mg/kg Rat

LD50 (Dermal): 12124,000 mg/kg Rabbit

N-HEXANE

LD50 (Oral): 5000,000 mg/kg Rat

LD50 (Dermal): 3000,000 mg/kg Rabbit

PROPAN-2-OL

LC50 (Inhalation): 72,600 mg/l/4h Rat
LD50 (Oral): 4710,000 mg/kg Rat
LD50 (Dermal): 12800,000 mg/kg Rat

BUTANONE

LC50 (Inhalation): 23,500 mg/l/8h Rat
LD50 (Oral): 2737,000 mg/kg Rat
LD50 (Dermal): 6480,000 mg/kg Rabbit

4-METHYLPENTAN-2-ONE

LC50 (Inhalation): 8,200 mg/l/4h Rat
LD50 (Oral): 2080,000 mg/kg Rat
LD50 (Dermal): >16000,000 mg/kg Rabbit

N-BUTYL ACETATE

LC50 (Inhalation): 21,100 mg/l/4h Rat
LD50 (Oral): >6400,000 mg/kg Rat
LD50 (Dermal): >5000,000 mg/kg Rabbit

12. ECOLOGICAL INFORMATION

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

HEPTANE

LC50 (96h) 375 mg/l Tilapia mossambica
EC50 (48h) 82,5 mg/l Daphnia magna
IC50 (72h) 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.

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

12.4. Mobility in soil: HEPTANE: slightly mobile in soil.

12.5. Results of PBT and vPvB assessment: Information not available

12.6. Other adverse effects: Information not available

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.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations. Waste transportation may be subject to ADR restrictions.

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:	3 UN: 1263
Packing Group:	II
Label:	3
Nr. Kemler:	33
Special Provision:	640D
Limited Quantity	LQ06
Tunnel restriction code	D/E
Proper Shipping Name:	Paint or paint related material

Carriage by sea (shipping):

IMO class: 3 UN: 1263

Packing Group: II
Label: 3
EMS: F-E, S-E
Marine Pollutant: NO
Proper Shipping Name: Paint or paint related material

Transport by air:

IATA: 3 UN: 1263
Packing Group: II
Label: 3
Cargo- Packaging instructions: 307 Maximum quantity: 60 L
Pass.- Packaging instructions: 305 Maximum quantity: 5 L
Proper Shipping Name: Paint or paint related material

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:
Product: **Point 40** Contained substance: **Point 48 TOLUENE**

Substances in Candidate List (Art. 59 REACH): None

Substances subject to authorisation (Annex XIV REACH): Information not available

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**

15.2. Chemical safety assessment

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

16. OTHER INFORMATION

Key for the CLP classifications mentioned in sections 2 and 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
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Skin Irrit. 2	Skin irritation, category 2
Eye Dam. 1	Serious eye damage, category 1
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
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H361d	Suspected of damaging the unborn child.
H361f	Suspected of damaging fertility.
H332	Harmful if inhaled.
H312	Harmful in contact with skin.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H373	May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H315	Causes skin irritation.

H318	Causes serious eye damage.
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.
EUH066	Repeated exposure may cause skin dryness or cracking.

Text of -R- phrases quoted in section 2-3 of the sheet.

R Phrases:	R10	Flammable
	R11	Highly flammable.
	R20	Harmful by inhalation
	R20/21	Harmful by inhalation and in contact with skin.
	R20/22	Harmful by inhalation and if swallowed
	R36	Irritating to eyes
	R36/37	Irritating to eyes and respiratory system.
	R37	Irritating to respiratory system
	R37/38	Irritating to respiratory system and skin
	R38	Irritating to skin
	R41	Risk of serious damage to eyes
	R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
	R50/53	Ery 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.
	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

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
6. Regulation (EC) 453/2010 of the European Parliament
7. The Merck Index. - 10th Edition
8. Handling Chemical Safety
9. Niosh - Registry of Toxic Effects of Chemical Substances
10. INRS - Fiche Toxicologique (toxicological sheet)
11. Patty - Industrial Hygiene and Toxicology
12. N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition

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.