

Safety data sheet

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

1.1. Product identifier

Product name **EREMOVER PLUS**

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

Intended use **Epoxy remover.**

1.3. Details of the supplier of the safety data sheet

Name **BISAZZA SPA**
Full address **Viale Milano 56**
District and Country **36075 Alte (VICENZA)**
ITALY
tel. +39 0444 707511
fax +39 0444 492088

e-mail address of the competent person
responsible for the Safety Data Sheet **safety@bisazza.com**
Product distribution by **BISAZZA SPA**

1.4. Emergency telephone number

For urgent inquiries refer to **+39 0444 707511**

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. Sol. 2	H228
Acute Tox. 4	H332
Skin Corr. 1A	H314
Eye Dam. 1	H318

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

Danger Symbols:

C

R phrases:

10-20/22-35

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:

H228	Flammable solid.
H332	Harmful if inhaled.
H314	Causes severe skin burns and eye damage.
EUH071	Corrosive to the respiratory tract.

Precautionary statements:

P210	Keep away from heat / sparks / open flames / hot surfaces. No smoking.
P260	Do not breathe dust / fume / gas / mist / vapours / spray.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves and eye/face protection.
P301+P330+P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor / physician.
P363	Wash contaminated clothing before reuse.
P370+P378	In case of fire: use carbon dioxide, chemical powder, water spray for extinction.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

Contains:

BENZYL ALCOHOL
FORMIC ACID

2.3. Other hazards.

Information not available.

SECTION 3. Composition/information on ingredients.**3.1. Substances.**

Information not relevant.

3.2. Mixtures.

Contains:

Identification.	Conc. %.	Classification 67/548/EEC.	Classification 1272/2008 (CLP).
FORMIC ACID			
CAS. 64-18-6	15 - 25	R10, C R35, Xn R20/22	Flam. Liq. 3 H226, Acute Tox. 3 H331, Acute Tox. 4 H302, Skin Corr. 1A H314, EUH071
EC. 200-579-1			
INDEX. -			
Reg. no. 01-2119491174-37			
1-METHOXY-2-PROPANOL			
CAS. 107-98-2	10 - 20	R10, R67	Flam. Liq. 3 H226, STOT SE 3 H336
EC. 203-539-1			
INDEX. 603-064-00-3			
Reg. no. 01-2119457435-35			
BENZYL ALCOHOL			
CAS. 100-51-6	10 - 20	Xn R20/22	Acute Tox. 4 H302, Acute Tox. 4 H332
EC. 202-859-9			
INDEX. 603-057-00-5			
Reg. no. 01-2119492630-38			
PROPYLENE CARBONATE			
CAS. 108-32-7	1 - 5	Xi R36	Eye Irrit. 2 H319
EC. 203-572-1			
INDEX. 607-194-00-1			

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.

T+ = Very Toxic(T+), T = Toxic(T), Xn = Harmful(Xn), C = Corrosive(C), Xi = Irritant(Xi), O = Oxidizing(O), E = Explosive(E), F+ = Extremely Flammable(F+), F = Highly Flammable(F), N = Dangerous for the Environment(N)

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

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

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.

If there are no contraindications, spray powder with water to prevent the formation of dust. Avoid breathing vapours/mists/gases.

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.

Use spark-proof mechanical equipment to collect the leaked product and place it in containers for recovery or disposal. If there are no contraindications, use jets of water to eliminate product residues.

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. 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. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities.

Store only in the original container. 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.

7.3. Specific end use(s).

Information not available.

SECTION 8. Exposure controls/personal protection.

8.1. Control parameters.

Regulatory References:

United Kingdom	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).
Éire	Code of Practice Chemical Agent Regulations 2011.
OEL EU	Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC.
TLV-ACGIH	ACGIH 2012

FORMIC ACID

Threshold Limit Value.

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
TLV-ACGIH		9,4	5	18,8	10
OEL	EU	9	5		
OEL	IRL	9	5		
WEL	UK	9,6	5		

Predicted no-effect concentration - PNEC.

Normal value for the terrestrial compartment	1,5	mg/kg
Normal value in fresh water	2	mg/l
Normal value in marine water	0,2	mg/l
Normal value for fresh water sediment	13,4	mg/kg
Normal value for marine water sediment	1,34	mg/kg
Normal value of STP microorganisms	7,2	mg/l

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers.			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation.	VND	9,5 mg/m3	VND	3 mg/m3			VND	9,5 mg/m3

1-METHOXY-2-PROPANOL

Threshold Limit Value.

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
TLV-ACGIH		369	100	553	150	
OEL	EU	375	100	568	150	SKIN
OEL	IRL	375	100	568	150	
WEL	UK	375	100	560	150	SKIN

Predicted no-effect concentration - PNEC.

Normal value for the terrestrial compartment	5,49	mg/kg
Normal value in fresh water	10	mg/l
Normal value for water, intermittent release	100	mg/l
Normal value in marine water	1	mg/l
Normal value for fresh water sediment	52,3	mg/kg d.w.
Normal value for marine water sediment	5,2	mg/kg d.w.
Normal value of STP microorganisms	100	mg/l

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers.			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral.	VND	VND	VND	3,3 mg/kg bw/d				
Inhalation.	VND	VND	VND	43,9 mg/m3	553,5 mg/m3	VND	VND	369 mg/m3
Skin.	VND	VND	VND	18,1 mg/kg bw/d	VND	VND	VND	50,6 mg/kg bw/d

BENZYL ALCOHOL

Predicted no-effect concentration - PNEC.

Normal value for the terrestrial compartment	0,456	mg/kg
Normal value in fresh water	1	mg/l
Normal value for water, intermittent release	2,3	mg/l
Normal value in marine water	0,1	mg/l
Normal value for fresh water sediment	5,27	mg/kg
Normal value for marine water sediment	0,527	mg/kg
Normal value of STP microorganisms	39	mg/l

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers.			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral.	VND	25 mg/kg	VND	5 mg/kg				
Inhalation.	VND	40,55 mg/m3	VND	8,11 mg/m3	VND	450 mg/m3	VND	90 mg/m3
Skin.	VND	28,5 mg/kg bw/d	VND	5,7 mg/kg bw/d	VND	47 mg/kg bw/d	VND	9,5 mg/kg bw/d

PROPYLENE CARBONATE

Predicted no-effect concentration - PNEC.

Normal value for the terrestrial compartment	0,81	mg/kg
Normal value in fresh water	0,9	mg/l
Normal value for water, intermittent release	9	mg/l
Normal value in marine water	0,09	mg/l

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers.				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral.			VND	25 mg/kg bw/d				
Inhalation.			10 mg/m ³	43,5 mg/m ³			20 mg/m ³	176 mg/m ³
Skin.			VND	25 mg/kg bw/d			VND	50 mg/kg bw/d

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.

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.

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).

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.

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.

SECTION 9. Physical and chemical properties.

9.1. Information on basic physical and chemical properties.

Appearance	paste
Colour	beige
Odour	characteristic
Odour threshold.	Not available.

pH.	2
Melting point / freezing point.	Not available.
Initial boiling point.	Not available.
Boiling range.	Not available.
Flash point.	30 °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.
Relative density.	0,950 Kg/l
Solubility	soluble
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 1999/13/EC) :	33,20 % - 315,40 g/litre.
VOC (volatile carbon) :	24,10% - 228,99 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.

BENZYL ALCOHOL: decomposes at temperatures higher than 870 °C with possibility of explosion.

1-METHOXY-2-PROPANOL: absorbs and dissolves in water and in organic solvents, dissolves various plastic materials; it is stable but with air it may slowly form explosive peroxides.

FORMIC ACID: decomposes under the effect of heat. At room temperature it can release carbon monoxide. Dissolves 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.

BENZYL ALCOHOL: may react dangerously with: hydrobromic acid and iron in the presence of heat, oxidising agents and sulphuric acid. Risk of explosion on contact with: phosphorus trichloride.

1-METHOXY-2-PROPANOL: can react dangerously with strong oxidising agents and strong acids.

FORMIC ACID: risk of explosion on contact with: sodium hypochlorite, nitromethane, hydrogen peroxide, furfuryl alcohol. Can react dangerously with: alkaline hydroxides, alkaline earth metals, aluminium, palladium-carbon, heat, oxidising agents, phosphorus pentoxide, nitro acid, concentrated sulphuric acid, trihydrate thallium trinitrate. Forms explosive mixtures with the air.

10.4. Conditions to avoid.

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

BENZYL ALCOHOL: avoid exposure to the air, sources of heat and naked flames.

1-METHOXY-2-PROPANOL: avoid exposure to the air.

FORMIC ACID: avoid exposure to light, sources of heat and naked flames.

10.5. Incompatible materials.

BENZYL ALCOHOL: sulphuric acid, oxidising substances and aluminium.

1-METHOXY-2-PROPANOL: oxidising agents, strong acids and alkaline metals.

FORMIC ACID: strong oxidising agents, strong bases, sulphuric acid and furfuryl acid.

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.

FORMIC ACID: carbon monoxide, hydrogen.

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.

Acute effects: inhalation of this product is harmful.

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.

This product is corrosive and causes serious burns and vesicles on the skin, which can arise even after exposure. Burns are very stinging and painful. Upon contact with eyes, it may cause serious harm, such as cornea opacity, iris lesions, irreversible eye coloration. Possible vapours are caustic for the respiratory system and may cause pulmonary edema, whose symptoms sometimes arise only after some hours.

Exposure symptoms may include: sting, cough, asthma, laryngitis, respiratory disorders, headache, nausea and sickness.

If swallowed, it may cause mouth, throat and oesophagus burns, sickness, diarrhoea, edema, larynx swelling and, consequently, asphyxia. Perforation of the gastro-intestinal tract is also possible.

This product may cause serious ocular lesions, cornea opacity, iris lesions, irreversible eye coloration.

1-METHOXY-2-PROPANOL: the main way of entry is the skin, whereas the respiratory way is less important owing to the low vapour tension of the product. Concentrations above 100 ppm cause eye irritation, nose and oropharynx. At 1000 ppm disturbance in the equilibrium and severe eye irritation is observed. Clinical and biological examinations carried out on exposed volunteers revealed no anomalies. Acetate produces greater skin and ocular irritation on direct contact. No chronic effects have been reported in man.

BENZYL ALCOHOL

LD50 (Oral). 1620 mg/kg Rat, m

LD50 (Dermal). 2000 mg/kg Rabbit

LC50 (Inhalation). > 4178 mg/m³ Rat, m/f, 4h

1-METHOXY-2-PROPANOL

LD50 (Oral). 3739 mg/kg Rat, m

LD50 (Dermal). > 2000 mg/kg Rat, m/f

LC50 (Inhalation). 54,6 mg/l/4h Rat

FORMIC ACID

LD50 (Oral). 730 mg/kg Rat

LC50 (Inhalation). 7,4 mg/l Rat

PROPYLENE CARBONATE
LD50 (Oral). > 5000 mg/kg bw/d
LD50 (Dermal). 2000 mg/kg bw/d

SECTION 12. Ecological information.

12.1. Toxicity.

BENZYL ALCOHOL
LC50 - for Fish. 460 mg/l/96h
EC50 - for Crustacea. 230 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants. 770 mg/l/72h Pseudokirchnerella subcapitata
Chronic NOEC for Algae / Aquatic Plants. 310 mg/l Pseudokirchnerella subcapitata

1-METHOXY-2-PROPANOL
LC50 - for Fish. > 1000 mg/l/96h Oncorhynchus mykiss
EC50 - for Crustacea. > 21100 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants. > 500 mg/l/72h Desmodesmus subspicatus

FORMIC ACID
LC50 - for Fish. 68 mg/l/96h Leuciscus idus melanotus
EC50 - for Crustacea. 32,19 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants. 32,64 mg/l/72h Scenedesmus subspicatus
Chronic NOEC for Crustacea. > 102 mg/l Daphnia magna

PROPYLENE CARBONATE
LC50 - for Fish. > 1000 mg/l/96h Cyprinus carpio
EC50 - for Algae / Aquatic Plants. > 900 mg/l/72h Scenedesmus subspicatus

12.2. Persistence and degradability.

BENZYL ALCOHOL
Rapidly biodegradable.

1-METHOXY-2-PROPANOL
Rapidly biodegradable.

FORMIC ACID
Rapidly biodegradable.

PROPYLENE CARBONATE
Rapidly biodegradable.

12.3. Bioaccumulative potential.

BENZYL ALCOHOL
Partition coefficient: n-octanol/water. 1,1
BCF. 1,37

12.4. Mobility in soil.

Information not available.

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: 4.1 UN: 2925



Packing Group: III
Label: 4.1 (8)
Nr. Kemler: 48
Limited Quantity: 5 kg
Tunnel restriction code: (E)
Proper Shipping Name: FLAMMABLE SOLID, CORROSIVE, ORGANIC, N.O.S. MIXTURE (formic acid)

Carriage by sea (shipping):

IMO Class: 4.1 UN: 2925



Packing Group: III

Label: 4.1 (8)
 EMS: F-A, S-G
 Marine Pollutant: NO
 Proper Shipping Name: FLAMMABLE SOLID, CORROSIVE, ORGANIC, N.O.S. MIXTURE (formic acid)

Transport by air:

IATA: 4.1 UN: 2925



Packing Group: III
 Label: 4.1 (8)
 Cargo:
 Packaging instructions: 449 Maximum quantity: 100 Kg
 Pass.:
 Packaging instructions: 446 Maximum quantity: 25 Kg
 Special Instructions: A3
 Proper Shipping Name: FLAMMABLE SOLID, CORROSIVE, ORGANIC, N.O.S. MIXTURE (formic acid)

SECTION 15. Regulatory information.

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

Seveso category. 6

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

None.

Substances in Candidate List (Art. 59 REACH).

None.

Substances subject to authorisation (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.

SECTION 16. Other information.

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

Flam. Liq. 3	Flammable liquid, category 3
Flam. Sol. 2	Flammable solid, category 2
Acute Tox. 3	Acute toxicity, category 3
Acute Tox. 4	Acute toxicity, category 4
Skin Corr. 1A	Skin corrosion, category 1A
Eye Irrit. 2	Eye irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
H226	Flammable liquid and vapour.
H228	Flammable solid.
H331	Toxic if inhaled.
H302	Harmful if swallowed.
H332	Harmful if inhaled.
H314	Causes severe skin burns and eye damage.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
EUH071	Corrosive to the respiratory tract.

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

R10	FLAMMABLE.
R20/22	HARMFUL BY INHALATION AND IF SWALLOWED.
R35	CAUSES SEVERE BURNS.
R36	IRRITATING TO EYES.
R67	VAPOURS MAY CAUSE DROWSINESS AND DIZZINESS.

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
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:

02 / 03 / 05 / 06 / 07 / 08 / 09 / 11 / 12 / 13 / 15 / 16.