



1 - Chemical product and company identification

- 1.1 - Trade name: MECUT SWL 40**
- 1.2 - Manufacturer: STEELFLUID S.r.l.**
Via Cecchi, 9/6
16129-Genova
Tel. 010-540691 Fax 010-5451087
- 1.3 – Telephone number: 010-540.691**
- 1.4 – Email address: steelfluid@steelfluid.it**
- 1.5 – Technician Email address: francesco@steelfluid.it**
- 1.6 – Emergency telephone number: 010-540.691**
- 1.7 – Expected use: Water dilution lubricating coolant**
- 1.8 – Compilation date: 15/09/2008**

2 – Hazards identification

This preparation is classified as hazardous. Classification: R52/53.

HAZARDS TO HUMAN HEALTH: This preparation is classified as not hazardous to health according to Directive 1999/45/EC.

PHYSICAL AND CHEMICAL HAZARDS/FIRE AND EXPLOSION HAZARD: This preparation is not classified as flammable.

HAZARDS TO THE ENVIRONMENT: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Other data: Preparation leakages may make the contaminated zone slippery.

3 - Composition/Information on ingredients

Contained substances deemed hazardous to human health according to the Directive 67/548/EEC as amended or for which there are acknowledged exposure limits:

Name	CAS	EINECS	INDEX	R Phrases	Symbols	%
FATTY ALCOHOL, PEO/PPO	103818-93-5			R41	Xi	0 ≤ x % < 2
2-N-BUTYL-BENZO[D]-ISOTHIAZOL-3-ONE	4299-07-4	420-590-7	606-079-003	R34-R43-R50/53	C N	x % < 0.1
N-METHYLDIETHANOLAMINE	105-59-9	203-312-7	603-079-00-5	R36	Xi	2.5 ≤ x % < 5
3,3'-METHYLENE BIS[5-METHYLOXAZOLIDINE]	66204-44-2	266-235-8		R34-R52-R21/22	C	2 ≤ x % < 4
2-AMINOETHANOL REACTED WITH THE PRESENT ACIDS	*141-43-5	*205-483-3		R20/21/22	Xn	2.5 ≤ x % < 10
SYNTHETIC SULFONATE	RESERVED	POLYMER		R53		0 ≤ x % < 2.5
FATTY ACIDS, TALLOIL, REACTION PRODUCTS WITH ETHANOLAMINE WITH EO	61791-19-3			R36	Xi	0 ≤ x % < 2.5

Other substances with Exposure Limit Values:

CAS 141-43-5 2-AMINOETHANOL

CAS 10043-35-3 BORIC ACID

Other components:

Non reacted acids, bases or alkanolamines *CAS/EINECS codes

This product contains highly-refined and solvent-treated mineral oils. According to the IP 346, the content in IPA is <3% (note L), therefore they are not regarded as hazardous (Directive 94/69/EC, 21-22° implementations of Directive 67/548/EC)



Name	CAS	EINECS	INDEX	R Phrases	Symbols	%
DISTILLATES (PETROLEUM), SOLVENT-REFINED LIGHT PARAFFINIC	64741-89-5	265-091-3	649-455-00-2			$25 \leq x \% < 50$
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC	64742-53-6	265-156-6	649-466-00-2	R65	Xn	$0 \leq x \% < 2.5$
LUBRICATING OILS	74869-22-0	278-012-2	649-484-00-0			$0 \leq x \% < 2.5$

R20/21/22-Harmful by inhalation, in contact with skin and if swallowed

R21/22- Harmful in contact with skin and if swallowed

R34-Causes burns

R36-Irritating to eyes

R41- Risk of serious damage to eyes

R43-May cause sensitization by skin contact

R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

R52- Harmful to aquatic organisms

R53- May cause long-term adverse effects in the aquatic environment

R65- Harmful: may cause lung damage if swallowed

Note H applicable. Classification of the hazardous properties as reported in Annex 1. Voluntary classification for the ones which are not listed.

Note 4 of Annex 1 applicable. Kinematic viscosity at 40°C > 7 cSt.

4 – First aid measures

4.1 – General indications

In case of incident, consult a doctor, providing the information contained on the label and in this sheet. The medication and use of medical equipment shall be carried out under strict control of the medical personnel. The first intervention, in case of accident, shall be carried out by trained and skilful personnel, in order to avoid further complications or damage to the victim. If the person is unconscious, NEVER supply food or beverages.

4.2 - Inhalation

In case of inhalation of superheated product, give first aid according to the following steps: take the victim to a well-ventilated place, keep him warm and at rest. In case of suspected aspiration, rush to hospital.

4.3 – Accidental eye contact

In case of accidental eye contact, immediately flush with water, by holding the eyelids open for at least 15 minutes. If an irritation occurs, consult a specialist.

4.4 – Accidental skin contact

In case of accidental skin contact, flush the affected area with water and soap. Do not use solvents; take off the soaked clothing, shoes included, and wash them before wearing them again.

4.5 - Ingestion

In case of ingestion, do not supply any beverages, do not induce vomiting and consult a doctor. Make the victim rest.

4.6 – Information for the doctor

Treat symptomatically.

5 – Fire-fighting measures

5.1 – Suitable extinguishing media and procedures

Because of its water content the product is not combustible. This product can burn only after the evaporation of the contained water, as a result of high temperatures during the fire. In case of fire or involvement of the preparation in a fire, use the following extinguishing procedures and media:

- Use jets of water to cool the surfaces of the containers exposed to the fire and to protect the people engaged in stopping the leakage. Use water to avoid the heating of the containers exposed to the fire.
- To extinguish the fire use: water spray, foam, chemical powder, CO₂.

5.2 – Extinguishing media not recommended

The following extinguishing media can be used without any particular contraindications: foam, chemical powder.

Avoid jets of water or under-pressure water.



5.3 - Risks resulting from the preparation, the combustion products

In case the preparation is involved in fires or explosions, do not breathe the fumes. this product can burn only after the evaporation of the contained water, as a result of high temperatures during the fire. The combustion produces a mixture of powders and gases, among which carbon oxides (TLV-TWA: 57 mg/m³), nitrogen oxides (TLV-TWA: 90 mg/m³), sulphur oxides (TLV-TWA: 5,2 mg/m³) and unidentified organic and/or inorganic compounds.

5.4 - Protective equipment for fire-fighters

Equip the fire-fighters with the following protective equipment:

- Suits against flames
- Helmet with mask or hood with shield
- Heat-resistant gloves
- Heat-resistant shoes
- Self-breathing apparatus or anti-gas mask
- Mask with filter for acids and/or organic vapours linked to the risks reported in the previous items, the fire size and its localization (open/close place), etc. ...
- Suitable fire-fighting protective equipment.

6 – Accidental release measures

6.1 – Personal precautions

In case of accidental release of the preparation, use the following personal protective equipment:

- suitable protective goggles, face shield, gloves, boots and aprons.

Consult the safety measures listed in paragraphs 7 and 8.

6.2 – Environmental protection

In case of accidental release:

- intervene to remove or detect the leakage and apply the procedures of containment and recovery, according to the indications reported in paragraph 6.3
- contain and recover the leakages in drums for waste disposal using absorbent and incombustible materials (such as sand, earth, vermiculite, white filter powder)
- avoid any penetration into the sewerage or into the waterways
- use drums for the recovery of waste material in compliance with the laws in force (see paragraph 13)

if the product contaminates aquifers, waterways or sewers, notify the competent authorities, complying with the laws procedures.

6.3 – Containment and recovery procedures

Comply with the following procedures of containment and recovery:

- use the protective equipment reported in paragraph 6.1
- contain the leakages in drums for waste disposal using absorbent and incombustible materials: sand, earth, vermiculite, white filter powder)
- recover such waste material in drums for waste disposal
- clean in compliance with the environmental regulation
- clean preferably by means of a cleanser, avoid using solvents.

7 – Handling and storage

The rules relevant to the storage sites can be applied to the workshops, where the product is used.

Conditions in accordance with the local authorities.

7.1 - Handling

During the handling use the protective equipment reported in paragraph 8 of this sheet and the following procedures:

- smoking, eating and drinking is forbidden in the areas where the preparation is used
- avoid oil mists formation
- handle in well-ventilated areas
- avoid direct contact with the product
- observe the precautions reported on the label and the rules on occupational safety
- when the container is not being used, keep it tightly sealed and in vertical position
- never open containers under pressure.

Fire prevention:

Deny the access to unauthorized people.

7.2 - Storage

Use the following precautions in the product storage:



- keep the chemical-physical characteristics of the product in mind, to avoid any interaction with other products (see paragraph 10 of the present Sheet)
- keep the container tightly sealed in a dry place
- keep away from food and beverages
- avoid materials highly reactive to water
- keep the containers tightly sealed and safe from frost
- do not store together with oxidizing agents.

BVD-Code (Switzerland): F 6 I PN3

Suitable materials and coating: carbon steel, stainless steel, polyethylene, polypropylene, polyester, teflon

Non-suitable materials and coating: Indiarubber, butyl rubber, EPDM rubber, polystyrene

The compatibility with plastic materials may vary; it is advisable to check it before use.

Usual shipping containers: tank wagons, road tankers, drums and canisters.

The containers, included the empty ones already used, shall be kept in ventilated places, at temperatures ranging between 5°C and 40°C, with the safety closure enabled.

Preservation time: 1 year.

OTHER WARNINGS: The container is still hazardous even when it is emptied from the contained product. Continue following all the precautions.

8 – Exposure control/personal protection

8.1 – General precautions to be taken

Use the product according to the indications reported in this sheet, paying particular attention to the indications contained in paragraph 7.1. Use the protective equipment reported in the following paragraphs: 8.3, 8.4 and 8.5.

When the product is in a confined space, mechanical ventilation is recommended, as well as when it is heated at a higher temperature than the ambient one.

The Safety Sheet (SS) is an informative document that takes into account the chemical nature of a substance or preparation and the negative effects it may cause.

PPE stands for Personal Protective Equipment and shall be compulsorily used when facing a “Residual Risk”. The “Residual Risk” belongs to a working situation and it is tightly linked to the conditions in the working environment and the organization of the work. The references to the PPE to be used - contained in the Safety Sheet- can only be informative, they cannot hence go beyond the limits imposed by the attributions of responsibilities.

The responsibility of choice of the suitable PPE according to the risk conditions in the working environment is on the EMPLOYER.

8.2 – Concentration limits in the working and biological environments

Use the personal protection equipment according to the Directive 89/686/EEC .

Exposure limit values according to INRS ED 984:

The name of the components identified in this paragraph by CAS is mentioned in paragraph 2.

Substance: ITALY – mineral oil, mists / SWITZERLAND - Mineralölnebel, einatembarer Staub

ITALY: Exposure duration: STEL – Exposure limit: 10 mg/m³ ITALY / SWITZERLAND: Exposure duration:

TWA/MAK – Exposure limit: 5 mg/m³

Regulations: ITALY: ACGIH TLV / SWITZERLAND: SUVA Exposure limits on the working place (MAK)

France	VME/ppm	VME/mg/m ³	VLE/ppm	VLE/mg/m ³	Note	TMP N°
141-43-5	3	8	-	-	-	49.49 Bis

Exposure limit values according to 2006/15/EC, 2000/39/EC and 98/24/EC:

EC	VME/ppm	VME/mg/m ³	VLE/ppm	VLE/mg/m ³	Note
141-43-5	2.5	1	7.6	3	Peau

Exposure limit values (2003-2006):

Switzerland	VME-mg/m ³ :	VME-ppm:	VLE-mg/m ³ :	VLE-ppm:	Temps:	RSB:
141-43-5	5 mg/m ³	2 ppm	10 mg/m ³	4 ppm	4x15	S
Germany/AGW	AGW:	AGW:	Faktor:	Bemerkunge n:		
10043-35-3	-	0,5 mg/m ³	2(I)	AGS, Y, 10		
141-43-5	2 ml/m ³	5,1 mg/m ³	2(I)	DFG, H, Y		
Denmark(3.4/3.4.1)	TWA:	STEL:	Anm:	TWA:	STEL:	Anm:
141-43-5	1 ppm	2.5 mg/m ³	H	1 ppm		H
UK/WELs	TWA:	STEL:	Ceiling:	Definition:	Criterion:	
141-43-5	3 ppm	6 ppm	-	-	-	
Ireland	TWA:	STEL:	Ceiling:	Definition:	Criterion:	
141-43-5	3 ppm	6 ppm	-	-	-	
Czech Rep.	TWA:	STEL:	Ceiling:	Definition:	Criterion:	
141-43-5	5 mg/m ³	10 mg/m ³	-	-	-	



Steelfluid^{S.r.l.}

Sweden	TWA:	STEL:	Ceiling:	Definition:	Criterion:
141-43-5	3 ppm	6 ppm	-	-	-
Spain	TWA:	STEL:	Ceiling:	Definition:	Criterion:
141-43-5	3 ppm	6 ppm	-	-	-
Poland	TWA:	STEL:	Ceiling:	Definition:	Criterion:
141-43-5	3 mg/m ³	10 mg/m ³	-	-	-
Norway	TWA:	STEL:	Ceiling:	Definition:	Criterion:
141-43-5	3 ppm	-	-	-	-
Belgium	TWA:	STEL:	Ceiling:	Definition:	Criterion:
141-43-5	3 ppm	6 ppm	-	-	-
Finland	TWA:	STEL:	Ceiling:	Definition:	Criterion:
141-43-5	3 ppm	6 ppm	-	-	-
Netherlands	TWA:	STEL:	Ceiling:	Definition:	Criterion:
141-43-5	1 ppm	3 ppm	-	-	-
UK/OES	TWA:	STEL:	Ceiling:	Definition:	Criterion:
141-43-5	3 ppm	6 ppm	-	-	-
ACGIH/TLV	TWA:	STEL:	Ceiling:	Definition:	Criterion:
10043-35-3	2 mg/m ³	6 mg/m ³	-	-	I
141-43-5	3 ppm	6 ppm	-	-	-

PERSONAL HYGIENE:

Provide the working environment with structures suitable for allowing people to wash.

Change the overalls, the clothing worn under the overalls and the shoes if they become soaked with the product. In fact, these protections – useful to minimize the contact – may become contamination sources if they are used after being soaked with the lubricating coolant.

WORKING METHOD:

Both use and choice of the personal protective equipment depend on the product risk, the working conditions and the processing. In general, it is recommended to use the safety goggles with side shields, working clothes protecting arms, legs and body as minimum protection. Moreover, every visitor entering the area where the product is handled should at least wear safety goggles with side shields.

EXPOSURE CONTROL:

Keep the hygiene of the working place, use correct working methods and, in the event that the product is used by operators with dry skin or in cold environments, follow the instructions in the next passage.

Change the gloves which were used (polyvinyl chloride, polyethylene, neoprene, non Indianrubber) when there are wear signs, cracks or internal contaminations.

If the concentrations in air exceed the limits given in this section, it is recommended to use a mask with filter to protect from overexposure through inhalation. The filter typology depends on the quantity and type of chemicals which are handled in the working place.

SKIN CARE:

Personal hygiene is the most effective protection factor. Do not use abrasives or solvents. It is advisable to use repairing creams after working in order to regenerate the lipid layer and it is recommended in the wintertime for those operators with dry skin. In fact, low temperatures and humidity may cause skin abrasions, thus making the workers more vulnerable to the action of the existing chemicals.

8.3 – Respiratory tract protection

During the handling at high temperatures, protect the respiratory tract with:

- Anti-gas mask with filter for organic vapours belonging to class A2 to be used only when the level of O₂ is > 17%.

In case of concentrations exceeding the exposure limit values, in case of mists/vapours formation or if the ventilation is not sufficient, wear the proper respiratory protections (in compliance with the Directive EC EN405 type FFA1P1).

8.4 – Hand protection

During the handling protect the hands with:

- Protective gloves, if advisable from the safety point of view.

Use suitable protective creams, especially when it is not advisable to use protective gloves because of safety reasons.

Suitable gloves (for example: nitrile rubber, penetration time: level 6 > 480 minutes, thickness 0,9-1 mm; EC certification in compliance with EN 374 cat. III).

8.5 – Eye protection

During the handling, protect the eyes with:

- Safety goggles with side protection or face shields.

8.6 – Skin protection

During the handling wear:

- Standard work clothing
- Accident-prevention shoes or boots resistant to chemical agents.



Take off the contaminated clothes. Wash the contaminated skin parts with water and soap.
Do not put the lubricating coolant-contaminated clothes into the work clothing pockets.

9 – Physical and chemical properties

9.1 – Physical state (at 20°C and at 101,3 kPa): Fluid liquid

9.2 - Odour: slight

9.3 - pH: slight basic

9.4 - Flash point: not specified

9.5 - Inflammability (solid, gas): Not applicable (the preparation is liquid)

9.6 - Autoinflammability: not applicable

9.7 - Explosive properties: No

9.8 - Comburent properties: No

9.9 - Relative density: < 1

9.10 - Solubility: Water solubility: dilutable

9.11 - Coefficient of repair n-octanol/water: N.A.

9.12 – Other information

pH (aqueous solution at 3%): 9,2

Density (ASTM D 1298): 0,97 kg/l

Viscosity at 40°C (ASTM D 445): 62 cSt

N.B.: Data reported herein are typical average values and not specification limits.

10 – Stability and reactivity

10.1 - Stability

From the available data the preparation does not seem to show specific risks. The preparation is stable in the handling and storage conditions recommended in chapter §7 of the Safety Sheet.

10.2 – Conditions to be avoided

Keep the preparation far from heat sources.

10.3 – Incompatible materials to be avoided

Avoid contact with: strong oxidants and reductants, materials violently reactive to water. Acids.

10.4 – Hazardous decomposition products

In correct operative conditions: none.

Like all the organic materials, it generates carbon oxides as a result of the combustion process (CO in case of partial combustion).

11 – Toxicological information

No available data on the preparation.

The toxicological information are based on the data concerning the single components and/or deduced from the evaluation of similar raw materials, in compliance with the criteria established by the regulation on substances/preparations.

11.1 – Toxicity due to inhalation

The product is not irritating to the respiratory system.

Unexpected toxic effects: LC50 > 5 mg/l/4h (rat).

Sensitization effects are not expected.

11.2 – Toxicity due to ingestion

Toxic effects are not expected: LD50 > 2000 mg/kg (rat).

11.3 – Toxicity due to skin contact

Slight cutaneous irritation is likely to occur.



After accidental skin contact irritations and/or dermatosis may occur, if correct personal hygiene procedures were not followed. No sensitization effect is expected. Toxic effects are not expected: LD50 > 2000 mg/kg (rat).

11.4 – Toxicity due to eye contact

When in contact with the eyes, it may cause slight irritation.

11.5 – Sensitization effects

From the available data the final product does not seem to show any specific risks through this penetration route.

11.7 – Cancerogenic effects

From the available data the preparation does not seem to show any specific risks through this penetration route.

11.8 – Mutagenic/teratogenic effects

From the available data the preparation does not seem to show any specific risks through this penetration route.

11.9 – Components specific effects

From the known data the product does not show to have harmful or chronic effects on human health. The product contains formaldehyde donor. Small quantities of formaldehyde can hence be released, with hazardous consequences for human health. The lubricating cooling oils in use may contain harmful substances, accumulated during their use.

12 – Ecological information

This product is not classified as Volatile Organic Compound, complying with the Directive 1999/13/EC.

No ecological data on the preparation available.

Avoid to dump the product into the sewerage or into waterways.

The ecological information is based on data concerning the single components and/or deduced from the evaluation of similar raw materials, in compliance with the criteria established by the regulation on substances/preparations.

12.1 – Likely effects of ecotoxicity of the preparation

Use the product according to the good working practices, by avoiding to spill it in the environment.

According to the Directive 2006/8/EC:

x % < 0.1	2-N-BUTYL-BENZO[D]-ISOTHIAZOL-3-ONE CAS: 4299-07-4 EINECS: 420-590-7 CE50 -48 hours (for Daphnia) (mg/l) 0.01 < EC50 ≤ 0.1 R50/53-Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
2 ≤ x % < 4	3,3'-METHYLENE BIS[5-METHYLOXAZOLIDINE] CAS: 66204-44-2 EINECS: 266-235-8 R52-Harmful to aquatic organisms.
0 ≤ x % < 2.5	SYNTHETIC SULFONATE CAS: RESERVED EINECS: POLYMER R53- May cause long-term adverse effects in the aquatic environment.

12.3 - Mobility

The product is liquid in normal conditions.

The product is emulsifiable in water.

If it enters the soil, it is partially absorbed.

12.4 – Persistence and degradability

No data available on the product persistence and degradability.

12.5 – Potential of bioaccumulation

Potentially bioaccumulable.

12.6 - Ecotoxicity

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Harmful to aquatic organisms: 10 < LC50/EC50/IC50 < 100 mg/l

12.7 – Other harmful effects

Germany: WGK 1 (VwVwS vom 17/05/99, KBws)

Information on absorbable organic halogens (AOX).

The product does not contain substances, which may increase the AOX value, because of their formulation.

13 – Disposal consideration

13.1 – Disposal of the preparation and its residues

This preparation shall have to be classified as: **hazardous special waste**. Recycle, if possible. This product CANNOT be disposed of in dumps and/or through public sewage, channels, natural waterways or rivers. The waste originating from or contaminated by the preparation shall have to be classified, stored and sent to a suitable disposal plant complying with the national and regional regulations in force. As to the handling and storage of the waste originated from or contaminated by the preparation use the procedures and precautions reported in paragraphs 6 and 7 of this Sheet.

13.2 – Containers disposal

Empty the container completely. The containers, although completely emptied out, shall not be dispersed into the environment. The preparation containers shall undergo a proper decontamination treatment before starting their disposal. Suitable substance for the cleaning: water. Keep the label(s) on the container.

The containers that contain the preparation residues shall be classified, stored and sent to a suitable disposal plant complying with the national and regional regulations in force.

13.3 – Waste European Catalogue code

Depending on its use, the product may be catalogued according to different codes. **Waste code (Decision**

2001/573/EC, Directive 2006/12/EEC concerning hazardous waste): 12 01 09 * emulsions and solutions for machinery, not containing halogens. The preparation does not contain halogenated compounds. The user must be aware that the use conditions may change the waste code after the use. Refer to Directive 2001/118/EC for waste definition.

14 – Transport information

14.1 - Precautions

Classification or labelling are not required for transport purposes.

14.2 – Road transport

The preparation does not represent a hazard and it is not subject to restrictions for road transportation.

14.3 – Transport by rail

The preparation does not represent a hazard and it is not subject to restrictions for rail transportation.

14.4 – Sea transport

The preparation does not represent a hazards and it is not subject to restrictions for sea transportation.

14.5 – Air transport

The preparation does not represent a hazard and it is not subject to restrictions for air transportation.

15 – Regulatory information

15.1 - According to the EEC/67/548 as amended, the product shall be labelled as follows:

SYMBOL: ----

R PHRASES: R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Classification and labelling: IT CONTAINS N-METHYLDIETHANOLAMINE and 3,3'-METHYLENE BIS[5-METHYLOXAZOLIDINE]

National Legislation : Where applicable, refer to the following regulations:
 Presidential Decree (D.P.R.) 175/88 as amended
 Presidential Decree 303/56 of 19/05/1956
 Ministerial Circulars 45 and 61
 Law Decree 626/94 as amended

National Legislation : Other regulations in force

- threshold limit value (TLV) and exposure biological indicators (EBI) ACGIH 1998 as amended.
- Protection of workers against risks relating to exposure to the chemical, physical and biological agents at work (LAW DECREE 212 of 30/07/1990) (published in: **Official Journal of the Italian Republic n° 181 of 04/08/1990**)
- General regulations for the working hygiene (Presidential Decree 303/56 of 19/03/1956) (published in: **Ordinary Supplement of the Official Journal n° 105 of 30/04/1956**) as amended.

- Rules and tables on the occupational diseases in the industry (Presidential Decree 336 of 13/04/1994) (published in: **Official Journal of the Italian Republic n° 131 of 07/06/1994**) as amended.
- Working safety (Law Decree 626 of 19/09/94) (Implementation of Directives [89/391/CEE](#), [89/654/CEE](#), [89/655/CEE](#), [89/656/CEE](#), [90/269/CEE](#), [90/270/CEE](#), [90/394/CEE](#) and [90/679/CEE](#), [93/88/CEE](#), [97/42/CE](#) and [1999/38/CE](#) concerning the improvement of safety and health of workers *at work*) (published in: **Ordinary Supplement of the Official Journal n° 265 of 12/11/1994**).
- Relevant incident risks (Seveso bis) (Law Decree 334 of 17/08/1999) (Implementation of Directive [96/82/EC](#) concerning the prevention of major-accident hazards involving dangerous substances) (published in: **Ordinary Supplement of the Official Journal n° 228 of 28/09/1999**) as amended.
- Regulations on the emissions (M.D. of 12/7/90) (Guidelines for the limitation of the emissions from the industrial facilities and the setting of the minimal values of emission) (published in: **Ordinary Supplement of the Official Journal n° 176 of 30/07/1990**).
- Regulations on the atmospheric pollution (M.D. of 12/7/90) – Guidelines for the limitation of the emissions of the industrial facilities and the setting of the minimal values of emission and Presidential Decree of 25/07/1991- published in: **Official Journal of the Italian Republic n° 175 of 27/07/1991**) as amended.
- Regulation on the water protection (Law Decree 152 of 11/5/99) (Rules on the water protection from the pollution and implementation of the Directive 91/271/EEC [91/271/EEC](#) concerning the treatment of urban waste water and of the Directive [91/676/EEC](#) concerning the protection of waters against pollution caused by the nitrates from agricultural sources) (published in: **Ordinary Supplement of the Official Journal n° 124 of 29/05/1999**) as amended.
- Regulations on the disposal and transport of hazardous waste (Law Decree 22/97 – Implementation of Directives [91/156/EEC](#) on waste, [91/689/EEC](#) on hazardous waste and [94/62/EC](#) on packaging and packaging waste – published in: **Ordinary Supplement of the Official Journal n° 38 of 15/02/1997** and Law Decree 389/97 – Amendments and integrations to the Law Decree 5 February 1997, n.22, regarding waste, hazardous waste, packaging and packaging waste – published in: **Official Journal of the Italian Republic n° 261 of 08/11/1997**) as amended.
- Regulations on the transport by land ADR/RID – M.D. of 4/9/1996 – Implementation of Directive [94/55/EC](#) of the Council concerning the approximation of the laws of the Member States with regard to the transport of dangerous goods by road (published in: **Ordinary Supplement of the Official Journal n° 282 of 02/12/1996**) as amended.
- Ministerial Circulars 45 and 61 as amended.
- Consolidation act on classification, packaging and labelling of hazardous substances (with implementation of Directive EC until 22° Adaptation): M.D. of 28/4/1997 – Implementation of [Article 37](#), paragraphs 1 and 2, of the Law Decree 3 February 1997, n. 52, concerning the classification, packaging and labelling of the hazardous substances (published in: **Ordinary Supplement of the Official Journal n° 192 of 19/08/1997**) as amended.
- Regulations on classification, packaging and labelling of dangerous preparations (L.D. 285 of 16/07/1998 – Implementation of Community Directives regarding the classification, packaging and labelling of dangerous preparations, complying with Article 38 of the Law 24 April 1998, n. 128) (published in: **Official Journal of the Italian Republic n° 191 of 18/08/1998**) as amended.
- Implementation of 24th Adaptation EC (M.D. 175 of 07/07/1999 – Rules relating to classification, packaging and labelling of dangerous substances as implementation of Directive [98/73/EC](#)) (published in: **Ordinary Supplement of the Official Journal n° 226 of 25/09/1999**) as amended.
- Regulations for the compilation of the Safety Sheets (with implementation until Directive [93/112/EC](#)) (M.D. of 4/4/97 – Implementation of [Article 25](#), paragraphs 1 and 2 of the Law Decree 3 February 1997, n. 52, regarding the classification, packaging and labelling of dangerous substances, with regard to the safety sheet on safety) (published in: **Official Journal of the Italian Republic n° 169 of 22/07/1997**) as amended.
- Implementation of 24th and 25th Adaptation EC (M.D. 10/04/2000 – Implementation of Directives [98/73/EC](#) and [98/98/EC](#), respectively adapting to Directive [67/548/EEC](#) for the 24th and 25th time) (published in: **Ordinary Supplement of the Official Journal n° 205 of 02/09/2000**) as amended.
- **Directive EEC/EAEC/EC n° 45 of 31/05/1999.**
1999/45/EC: Directive of the European Parliament and Council, of 31 May 1999, concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to classification, packaging and labelling of dangerous preparations.
- **Ministerial Decree of 26/01/2001** – Regulations relating to classification, packaging and labelling of dangerous substances as implementing Directive [2000/32/EC](#) (adapting to technical progress of Directive [67/548/EEC](#) for the 26th time).
- **Ministerial Decree of 11/04/2001** – Implementation of the Directive [2000/33/EC](#) adapting to technical progress of Directive [67/548/EEC](#) for the 27th time, regarding the classification, packaging and labelling of dangerous substances.
- **Community Directive [2001/59/EC](#) of 06/08/2001** adapting to technical progress of Directive [67/548/EEC](#) for the 28th time regarding the classification, packaging and labelling of dangerous substances.
- **Community Directive [2001/58/EC](#) of 27/07/01** amending for the second time Directive [91/155/EC](#) defining and laying down the detailed arrangements for the system of specific information relating to dangerous preparations in implementation of Article 14 of Directive [1999/45/EC](#)
- **Law Decree of 14 March 2003, n. 65 and Law Decree n.260 of 28 July 2004** – Implementation of Directives [1999/45/EC](#) and [2001/60/EC](#) relating to the classification, packaging and labelling of dangerous preparations.



- **Decree of 16 January 2004, n. 44** – Implementation of Directive 1999/13/EC on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities according to Article 3, paragraph 2 of the Presidential Decree of 24 May 1988, n. 203.
- **Decree of 28/02/2006** – Implementation of Directive 2004/74/EC, adapting to technical progress of Directive 67/548/EEC for the 29th time, concerning classification, packaging and labelling of dangerous substances.
- **Regulation (EC) n. 1907/2006** concerning the registration, evaluation, authorization and restriction of chemicals (REACH) and creating a European Agency for chemicals.
- **Decree of 04/02/2008** – Implementation of Directive 2006/15/EC, defining a second list of indicative occupational exposure limit values, as implementation of Directive 98/24/EC of the Council, and amending the Directives 91/322/EEC and 200/39/EC.

15.2 – Restrictions to the marketing and use

No component shows any limitations to the marketing and/or use.

16 – Other information

Use and limitations : Use only in industrial manufacturing processes.

Safety Sheet Distribution : The information contained in this sheet must be available for all those people who handle the product.

GLOSSARY OF THE RISK PHRASES REPORTED IN THE DOCUMENT

R20/21/22-Harmful by inhalation, in contact with skin and if swallowed

R21/22- Harmful in contact with skin or if swallowed

R34- Causes burns

R36-Irritating to eyes

R41: Risk of serious damage to eyes

R43-May cause sensitization by skin contact

R50/53- Very 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

R52- Harmful to aquatic organisms

R53- May cause long-term adverse effects in the aquatic environment

R65: Harmful: may cause lung damage if swallowed

The information contained herein is believed to be accurate and correct based on our present state of knowledge and working experience with this product, and shall not be deemed exhaustive. It is applied to the product complying with the specifications. In case of compounds or mixtures, make sure that no new hazard may occur. It does in no way exempt the user of the product from complying with the ensemble of laws, regulations and administrative provisions concerning the product, working hygiene and safety. This Sheet was drawn by using the program ESWIN together with the database SINTALEX .

Particular provisions:

Germany: WGK 1 (VwVwS vom 17/05/99, KBws)

SWITZERLAND: Information concerning "Ordinance on Incentive Taxes on Volatile Organic Compounds (OCOV)": see paragraph 9.

(I) Category I: substances for which the localized effect has an assigned OEL or for substances with a sensitizing effect in respiratory passages

H: cutaneous penetration

Y: If the OEL and BAT values are complied with, there should be no risk of reproductive damage.

DFG: Senate's Commission for the testing of hazardous substances in the workplace (German Research Foundation)

AGS: Decision of the Committee for Dangerous Substances

EU: European Union

(10) The limit value pertains to the metal content as the analytical basis for calculations.

For technical information: Telephone number: 010-540.691

Review summary:

This sheet has been reviewed in the section(s): 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16.

In those sections, a vertical bar (|) on the left margin indicates a change of the previous version. If a section is marked, but it does not point out the bar, then it indicates that the text was cancelled

SHEET VERSION n.5 of 15/09/2008

This version replaces and nullifies any other versions issued before.

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