SECTION 1: Identification of the substance or compound and the company/enterprise

1.1	**Product identification**		
	Denomination	**GAS CONTROL**	
	Registration No.	Not applicable (the product is a compound): see the information related to the constituent substances in section 3.2.	
1.2	**Identified pertinent uses of the substance or compound and uses not recommended**		
	Description/use	Gas leak detector	
1.3	**Information on the safety data sheet supplier**		
	Company name	OXYTURBO SpA	
	Address and state	Via Serio, 15 25015 – Desenzano del Garda (BS) Italy	
	Telephone	+39.030.9911855	
	Fax	+39.030.9911271	
	E-mail of the person responsible for the safety data sheet		safety@oxyturbo.it
1.4	**Emergency telephone number**		
	List of Poison Control Centre telephone numbers in Italy		
	Bergamo	Papa Giovanni XXII Hospital	800883300
	Florence	"Careggi" Hosp. Medical Toxicology Dept.	055-7947819
	Foggia	Foggia Univ. Hosp.	0881-732326
	Milan	Niguarda Ca' Granda Hosp.	02-66101029
	Naples	"A. Cardarelli" Hosp.	081-7472870
	Pavia	PCC National Centre of Toxicological Information	0382-24444
	Rome	CAV "Bambino Gesù Pediatric Hospital"	06-68593726
	Rome	PCC "Umberto I" Polyclinic	06-49978000
	Rome	PCC "A. Gemelli" Polyclinic	06-3054343

SECTION 2: IDENTIFICATION OF HAZARDS

2.1 Classification of the substance or compound

The product is classified as hazardous pursuant to EC Regulation 1272/2008 (CLP) as amended and updated). The product therefore requires a safety data sheet in compliance with the provisions of EC Regulation 1907/2006 as amended and updated.

Hazard classification and indications:

Aerosol, 3	H229
Skin Irrit. 2	H315
Eye Irrit. 2	H319
STOT SE 3	H335

The complete text of the hazard indications (H) can be found in section 16 of the safety data sheet.

2.2 Elements of the label

Pictograms 

Warning: Attention

Contains: 2-ethylhexan-1-ol

Hazard indications:

H229 Pressurised container: may burst if heated.

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

General recommended cautions:

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.

Recommended cautions - Prevention:

P210	Keep away from heat sources, hot surfaces, sparks, open flames or other ignition sources. Do not smoke
P251	Pressurised container: Do not pierce or burn, even after use.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.

Recommended cautions - Reaction:

P305+P351+P338	IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists, get medical advice/attention.

Recommended cautions - Preservation:

P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Recommended cautions-Disposal

P501	Dispose of container in compliance with local regulations.

2.3 Other hazards

Nothing to state.

SECTION 3: COMPOSITION/INFORMATION ON THE INGREDIENTS

3.1 Compounds

Identification	Concentration (% weight)	REACH registration N°.	CAS number	EC number	Substance number	Classification
Dioctyl Sodium Sulphosuccinate [Docusate sodium]	3-4	01-2119491296-29-0022	577-11-7	209-406-4	--	Eye Dam. 1 H318 Skin Irrit. 2 H315
Sodium lauroylsarcosinate [Sodium N-lauroylsarcosinate]	2-3	01-2119527780-39-xxxx	137-16-6	205-281-5	--	Acute Tox. 2; H330 Eye Dam. 1 H318 Skin Irrit. 2; H315
Nitrous oxide [Dinitrogen oxide]	1	01-2119970538-25-xxxx	10024-97-2	233-032-0	--	Ox. Gas 1; H270
Benzotriazole	0.2-0.3	01-2119979079-20-xxxx	95-14-7	202-394-1	--	Acute Tox. 4; H302 Eye Irrit. 2; H319 Aquatic Chronic 2; H411
Ethylene glycol [ethylene glicol]	0.1-0.2	01-2119456816-28-xxxx	107-21-1	203-473-3	603-027-00-1	Acute Tox. 4; H302
2-Ethyl-1-hexanol [2-Ethylhexan-1-ol]	0.05	01-2119487289-20-xxxx	104-76-7	203-234-3	--	Acute Tox. 4; H332 Eye Irrit. 2; H319 Skin Irrit. 2; H315 STOT SE 3; H335

The complete text of the hazard indications (H) can be found in section 16 of the safety data sheet.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

- Eye contact: Wash immediately with plenty of running water, with eyelids open, for at least 10 minutes. Following this, protect the eyes with sterile gauze or a clean, dry, handkerchief. Consult an optician, if necessary.
- Skin contact: take off contaminated clothing. Wash with plenty of water and neutral soap. Seek medical help should the irritation persist.
- Ingestion: in the case of accidental ingestion, consult a doctor. Do not induce vomiting unless directed by a doctor. Never give anything by mouth if the person is unconscious and if not authorised by a doctor. It is possible to give activated carbon suspended in water or medicinal mineral oil.
- Inhalation: ventilate the environment. Immediately remove the exposed person from the contaminated environment and let them rest in a well-ventilated place. If the person feels unwell, consult a doctor.

4.2 Main symptoms and effects, both acute and delayed

Prolonged contact with the product can irritate the respiratory tract.

4.3 Indications of the possible need to immediately seek medical attention and special treatments

If the person involved feels unwell, seek medical advice immediately and show the doctor the container or safety data sheet.

SECTION 5: FIRE PROTECTION MEASURES

5.1 Means of extinguishing

Suitable extinguishing media: carbon dioxide, foam, chemical powder and atomised water.
Unsuitable extinguishing media: none.

5.2 Special hazards stemming from the substance or the compound

In the event of fire, do not inhale combustion fumes (carbon monoxide, toxic pyrolysis products, etc.). The 1H-benzotriazole, decomposes due to heating. Organic cracking products (aniline, nitrobenzene), noxious gases, carbon oxides, nitric gases may be released from the combustion of Benzotriazole. Keep recipients cool. The nitrous oxide can release toxic or irritating gases/fumes (NO, NO2).

5.3 Recommendations for fire fighting personnel

In the event of a fire, use an approved type self-contained breathing apparatus (EN 137 type), gloves and emergency protection clothing.

SECTION 6: MEASURES IN CASE OF ACCIDENTAL SPILL

6.1 Personal precautions, protection devices and procedures in case of emergency

The product is packed in a small pressurized cartridge. Apart from accidents, accidental leaks that can lead to emergency situations are unlikely. The product is not flammable at room temperature.

6.1.1 For non-emergency personnel:

Provide suitable ventilation of the workplace. Do not smoke. Wear protective mask, gloves, and clothes. It contains nitrous oxide. Ventilate the rooms in which it is used (see section 10).

6.1.2 For emergency responders:

Wear protective clothing and personal protection equipment in order to prevent inhalation and contact with the eyes and skin and follow the emergency procedures (see section 8).

6.2 Environmental precautions

In water, the product increases the concentration of surfactants and parameters related to organic substances in water (COD). Curb the leakage, and prevent any liquid residues from getting into the superficial waters and the sewers. Should the product have run into a stream, sewage, or have contaminated either soil or vegetation, notify the competent authorities. See sections 12 and 13.

6.3 Methods and materials for containment and reclamation

If the product is not volatilized, clean and collect the residues, using absorbent material if necessary (sand, sepiolite, cement, sawdust).

Following collection, wash both the area and the concerned materials with water. See sections 12 and 13.

6.4 Reference to other sections

Any information concerning personal protection and disposal can be found in sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Product packed in pressurized cartridge. Do not expose to sunshine or to temperatures above 50°C. Avoid contact and vapour inhalation. Ensure suitable ventilation of the workplace (see also section 8). Do not eat, drink or smoke during use of the product.

7.2. Conditions for safe storage, including any incompatibilities

Store in a well ventilated places. Protect recipients from blows and handle them with care. Avoid storing them next to fuel gas containers (see also section 10).

7.3 Specific end uses

Use for purposes other than those indicated in subsection 1.2 is not recommended.

SECTION 8: EXPOSURE CONTROL/INDIVIDUAL PROTECTION

8.1 Control parameters

National: n.s.
European Community: n.s.
ACGIH 2014

ETHYLENE GLYCOL: VLE-8 hours = 52 mg/m3, 20 ppm
VLE-Short term = 104 mg/m3, skin = 40 ppm
TLV-C = 100 mg/m3 = 39.39 ppm, A4.

NITROUS OXIDE: TLV-TWA = 50 ppm, 90 mg/m3

Exposure limit values DNEL

DIOCTYL SODIUM SULPHOSUCCINATE - CAS: 577-11-7
Industrial worker: 313 mg/kg - Exposure: Human Oral Contact - Frequency: Long term, systemic effects
Industrial worker: 44.1 mg/m3 - Exposure: Human Inhalation - Frequency: Long term, systemic effects
Consumer: 18.8 mg/kg - Exposure: Human Skin Contact - Frequency: Long term, systemic effects
Consumer: 13 mg/m3 - Exposure: Human Inhalation - Frequency: Long term, systemic effects

SODIUM LAUROYLSARCOSINATE - CAS: 137-16-6
Industrial worker: 70.53 mg/m3 - Exposure: Human Inhalation - Frequency: Long term, systemic effects
Industrial worker: 20 mg/kg - Exposure: Human Skin Contact - Frequency: Long term, systemic effects
Consumer: 10 mg/kg - Exposure: Human Oral Contact - Frequency: Long term, systemic effects
Consumer: 17.39 mg/m3 - Exposure: Human Inhalation - Frequency: Long term, systemic effects

BENZOTRIAZOLE - CAS: 95-14-7
Professional: 19.0 mg/m3 - Exposure: Human Inhalation - Frequency: Long term, systemic effects
Professional: 10.8 mg/kg - Exposure: Human Skin Contact - Frequency: Long term, systemic effects
Consumer: 9.55 mg/m3 - Exposure: Human Inhalation - Frequency: Long term, chronic effects
Consumer: 0.54 mg/kg - Exposure: Human Oral Contact - Frequency: Long term, systemic effects
Consumer: 0.54 mg/kg - Exposure: Human Skin Contact - Frequency: Long term, systemic effects

ETHYLENE GLYCOL - CAS: 107-21-1
Professional: 106 mg/kg - Exposure: Human Skin Contact - Frequency: Long term, systemic effects
Professional: 35 mg/m3 - Exposure: Human Inhalation - Frequency: Long term, local effects
Consumer: 53 mg/kg - Exposure: Human Skin Contact - Frequency: Long term, systemic effects
Consumer: 7 mg/m3 - Exposure: Human Inhalation - Frequency: Short term, systemic effects

2-ETHYL-1-HEXANOL - CAS: 104-76-7
Professional: 106.4 mg/m3 - Exposure: Human Inhalation - Frequency: Short term, local effects
Professional: 23 mg/kg - Exposure: Human Skin Contact - Frequency: Long term, systemic effects
Professional: 53.2 mg/m3 - Exposure: Human Inhalation - Frequency: Short term, systemic effects
Consumer: 53.2 mg/m3 - Exposure: Human Inhalation - Frequency: Short term, local effects
Consumer: 11.4 mg/kg - Exposure: Human Oral Contact - Frequency: Long term, systemic effects

Exposure limit values PNEC
DIOCTYL SODIUM SULPHOSUCCINATE - CAS: 577-11-7
Target: Fresh water - Value: 0.0066 mg/l
Target: Salt water - Value: 0.00066 mg/l
Target: Fresh water sediments - Value: 0,653 mg/kg
Target: Salt water - Value: 0.0653 mg/kg

SODIUM LAUROYLSARCOSINATE - CAS: 137-16-6
Target: Fresh water - Value: 0.0297 mg/l
Target: Salt water - Value: 0.003 mg/l
Target: Occasional emission - Value: 0.297 mg/l

BENZOTRIAZOLE - CAS: 95-14-7
Target: fresh water - value 0.0194 mg/l
Target: salt water - value 0.0194 mg/l
Target: sediments in fresh water - value 0.00375 mg/kg
Target: sediments in salt water - value 0.00375 mg/kg
Target: water, intermittent release- value 0.158 mg/l
Target: STP micro-organisms - value 39.4 mg/l
Target: terrestrial compartment - value 0.003 mg/kg

ETHYLENE GLYCOL - CAS: 107-21-1
Target: Fresh water - Value: 10 mg/l
Target: Salt water - Value: 1 mg/l
Target: Land (agricultural) - Value: 1.53 mg/kg
Target: Occasional emission - Value: 10 mg/l

2-ETHYL-1-HEXANOL - CAS: 104-76-7
Target: Fresh water - Value: 0.017 mg/l
Target: Salt water - Value: 0.0017 mg/l
Target: Occasional emission - Value: 0.17 mg/l
Target: Salt water sediments - Value: 0.028 mg/kg
Target: Fresh water sediments - Value: 0.28 mg/kg

8.2 Exposure checks

Professional exposure check

Assess the risks in accordance with Legislative Decree 81/2008 as updated and amended The following means of protection are indicated, with specifications from the manufacturer concerning the protection equipment:

Respiratory tract: wear a mask with an P-type filter or a combined ABEK-P type, the class of which (1,2,3) must be selected in relation to the concentration use limit (EN 141).

Hands: protect with category I gloves (ref. Directive 89/686/EEC and EN 374)

Eyes: goggles (EN 166 type), face shield.

Skin: wear work garments with long sleeves, professional category I accident-prevention footwear (ref. Directive 89/686/EEC and EN 344). Wash yourself with soap and water after having removed the protective clothing.

Environmental exposure check

Refer to the current prevailing regulation on environmental pollution - Legislative Decree 03/04/2006 No. 152 as updated and amended

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on the fundamental physical and chemical properties

a)	Appearance	Foamy liquid
b)	Odour	Lightly scented
c)	Olfactory threshold	Not available
d)	pH at 20°C	7-8
e)	Freezing point	< 0°C
f)	Boiling point	> 100 °C
g)	Flash point	Non-inflammable (see point 9.2)
h)	Evaporation rate	Not available
i)	Flammability	Non-inflammable
j)	Upper / lower flammability limits	Non-inflammable
k)	Vapour pressure	Not available
l)	Vapour density:	Not available
m)	Relative density	Not available
n)	Solubility	soluble (almost completely) in water
o)	Partition ratio (n-octanol/water)	ND (not available)
p)	Autoignition temperature	There is no auto-ignition
q)	Decomposition temperature	Not available
r)	Viscosity	Not available
s)	Explosive properties	Not available
t)	Oxidising properties	Nitrous oxide: oxidising agent

9.2 Other information

The evidence of non-inflammability of the mixture is contained in test report n°. 201204435 dated 15.10.2012 issued by the Stazione Sperimentale dei Combustibili in San Donato Milanese.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

There are no particular reaction hazards with other substances in normal conditions of use.
BENZOTRIAZOLE - CAS: 95-14-7:decomposes at 160°C.
ETHYLENE GLYCOL - CAS: 107-21-1: in open air, it absorbs moisture. Decomposes at temperatures exceeding 200°C/392°F.

10.2 Chemical stability

The product is stable in normal use and storage conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions are not envisioned in normal conditions of use and storage.

ETHYLENE GLYCOL - CAS: 107-21-1
Risk of explosion in contact with: perchloric acid It can react dangerously with: chlorosulphuric acid, sodium hydroxide, sulphuric acid, phosphorus pentasulphide, chromium oxide (III), chromyl chloride, potassium perchlorate, potassium dichromate, sodium peroxide, aluminium.

10.4 Conditions to avoid

Avoid overheating, electrostatic discharges, and ignition sources.
Nitrous oxide helps the combustion of other substances: do not expose to naked flames or sparks – do not smoke.
The product, thus composed, has been put through inflammability tests according to 2008/47/EC and has resulted as non-inflammable.

10.5 Incompatible materials

The nitrous oxide may strongly react with flammable products and reducing agents generating a danger of fire and explosion. The gas is a strong oxidizing agent over 300°C and may create explosive mixtures with ammonia, carbon monoxide, hydrogen sulphide, oil, grease, and fuels.

10.6 Hazardous decomposition products

Toxic or irritant gas or vapours (nitrogen oxides, aniline, nitrobenzene, carbon oxides), which are potentially hazardous for health, may be released by thermal decomposition or in event of fire.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

There is no toxicological data available concerning the mixture as it is. Below find a list of the toxicological data concerning the main substances in the mixture.

The nitrous oxide is a slightly narcotic, anaesthetic, and asphyxiating substance at high concentrations. Overexposure effects: excitement, euphoria, vertigo, drowsiness, uncoordinated movements, narcosis, asphyxiation. Its anaesthetic potential shows itself when the concentration exceeds 70% in volume.

Acute toxicity

DIOCTYL SODIUM SULPHOSUCCINATE - CAS: 577-11-7
LD50 (Oral)> 3000 mg/kg Species: rat
LD50 (Dermal)> 2000 mg/kg Species: rat

SODIUM LAUROYLSARCOSINATE - CAS: 137-16-6
LD50 (Oral)> 5000 mg/kg
LC50 (Inhalation)> 1 mg/l/4h [Note: solution > 30%]

NITROUS OXIDE:
LC50 (Inhalation): > 250 ppm/4h Rat

BENZOTRIAZOLE - CAS: 95-14-7
LD50 (Oral): > ~~560~~ 1000 mg/kg Rat
LD50 (Dermal): > 1000 mg/kg Rat
LC50 (Inhalation): 1.91 mg/l/3h Rat

ETHYLENE GLYCOL - CAS: 107-21-1
LC50 - (Inhalation) - Species: Rat > 2.5 mg/l
LD50 - (Oral) - Species: Rat = 7712 mg/kg
LD50 - (Skin) - Species: Rat > 3500 mg/kg

2-ETHYL-1-HEXANOL - CAS: 104-76-7
LD50 (Oral): 3290 mg/kg (rat)
LC50 (4 h) (Inhalation of vapours): > 0.89 mg/l (rat)
LC50 (Inhalation of vapours): 5.3 mg/l (rat)

b) Skin corrosion/skin irritation: causes skin irritation.

c) Serious eye damage/eye irritation : causes serious eye irritation.

d) Respiratory or skin sensitisation: based on the data available, the criteria of classification are not met

e) Germ cell mutagenicity : based on the data available, the criteria of classification are not met

f) Carcinogenicity : based on the data available, the criteria of classification are not met

g) Reproductive toxicity: based on the data available, the criteria of classification are not met

h) Specific target organ toxicity (STOT) — single exposure: can irritate the .respiratory tract.

i) Specific target organ toxicity (STOT) — repeated exposure: based on available data, the classification criteria are not met

j) Aspiration hazard : based on the data available, the criteria of classification are not met.

SECTION 12: ECOLOGICAL INFORMATION

There is no eco-toxicological data available concerning the mixture as it is. Below find a list of the eco-toxicological data concerning the main substances in the mixture.

12.1 Toxicity

DIOCTYL SODIUM SULPHOSUCCINATE - CAS: 577-11-7
Acute aquatic toxicity:
LC50 - Species: Brachydanio rerio (Fish) 48 mg/l - Duration h: 24
LC50 - Species: Fish 369 mg/l - Duration h: 48
Chronic aquatic toxicity:
EC50 - Species: Daphnia 24.8 mg/l - Duration h: 24
Toxicity for plants:
EC50 - Species: Algae 39.3 mg/l - Duration h: 72

SODIUM LAUROYLSARCOSINATE - CAS: 137-16-6
Acute aquatic toxicity:
LC50 - Species: Fish 107 mg/l - Duration h: 96
EC50 - Species: Daphnia 29.7 mg/l - Duration h: 48
Toxicity for plants:
EC50 - Species: Algae > 1000 mg/l - Duration h: 3 - Note: sol. 30%

ETHYLENE GLYCOL - CAS: 107-21-1
Acute aquatic toxicity:
LC50 - Species: Fish =72860 mg/l - Duration h: 96
EC50 - Species: Daphnia > 100 mg/kg - Duration h: 48
Toxicity for plants:
EC50 - Species: Algae 6500-13000 mg/l - Duration h: 96

2-ETHYL-1-HEXANOL - CAS: 104-76-7
Acute aquatic toxicity:
LC50 - Species: Fish 28.2 mg/l - Duration h: 96
EC50 - Species: Daphnia 39 mg/l - Duration h: 48
Toxicity for bacteria:
NOEC > 300 mg/l - Duration h: 24
Toxicity for plants:
Endpoint: EC50 - Species: Algae 11.5 mg/l - Duration h: 72

BENZOTRIAZOLE - CAS: 95-14-7
Aquatic toxicity: EC50/Daphnia/48h = 91 mg/l
toxicity for fish: LC50/bluegill sunfish (Lepomis macrochirus)/96h: 25 mg/l; LC50/Brachydanio rerio (zebra fish): 100 mg/l
toxicity on the algae: EC50/Scenedesmus quadricauda/72h: 231 mg/l
toxicity for bacteria: inhibition of activated sludge respiration: EC50: 1060 mg/l

12.2 Persistence and degradability
The surfactants contained in the mixture appear to be easily biodegradable:

12.3 Bioaccumulation potential
Benzotriazole: no significant bioaccumulative potential (log Kow 1- 3).

12.4 Mobility in the soil
Information not available

12.5 Results of PBT and vPvB assessment
On the basis of the data available, the product does not contain PBT or vPvB substances at a percentage exceeding 0.1%.

12.6 Other adverse effects

None

SECTION 13: CONSIDERATIONS FOR DISPOSAL

13.1 Waste treatment method

Avoid compacting or in any case damaging the containers. Apply the same safety standards to the waste that is foreseen for the entire product and in particular, the standard of not perforating the container or subjecting it to combustion.

Collect and deliver the waste (product and contaminated packaging) to specifically qualified disposers who are authorised to dispose of hazardous flammable waste.

Refer the prevailing regulation on hazardous waste disposal (Legislative Decree 152/2006 as updated and amended).

SECTION 14: INFORMATION ON TRANSPORTATION

14.1 UN number: 1950

14.2 UN proper shipping name: AEROSOL

14.3 Transport hazard class/es: 2.2

14.4 Packaging group: not applicable

14.5 Hazards for the environment: material non hazardous for the environment

14.6 Special precautions for the users:

- avoid transport on vehicles where the loading area is not separate from the driver and passenger compartment.
- Ensure that the driver is informed of the potential risk of the load and that he or she knows what to do in the event of an accident or emergency.
- Exemption for limited quantities (Section 3.4) = 1 litre / 30 kg.
- Tunnel restriction code: E
- Sea transport: EmS: F-D, S-U
- Air transport: Packing instruction Y203

14.7 Bulk transport in accordance with Annex II of MARPOL and the IBC code: not applicable

SECTION 15: INFORMATION ON REGULATION

15.1 Health, safety and environmental standards and legislation specific for the substance or compound

Seveso category: none

Sale and use restrictions: no restriction in accordance with annex XVII of EC Regulation 1907/2006 (REACH) as amended and updated.

Substances on Candidate List (Art. 59 REACH): none.

Substances subject to authorisation (Annex XIV REACH): none.

15.2 Chemical safety assessment

A chemical safety assessment was not drafted for the substance.

SECTION 16: OTHER INFORMATION

i) Indication of the modifications:

This sheet voids and replaces every previous edition.

All sections of this sheet have been revised with respect to the previous edition.

ii) Abbreviations and acronyms:

ADR:	The European Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labelling, Packaging.
DNEL:	Derived No-Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.

LC50:	Lethal Concentration for 50% of the test population.
LD50:	Lethal Dose for 50% of the test population.
PNEC:	Predicted No Effect Concentration.
STEL:	Short-term exposure limit.
STOT:	Specific target organ toxicity.
VLE- 8 hours	concentration of the pollutant for an 8-hour working day.
VLE-short term	limit value above which exposition shall be avoided. Unless otherwise specified, it refers to a period of 15 minutes.
TLV-TWA	(Threshold Limit Value - Time-Weighted Average) = average time-weighted concentration on a conventional 8-hour working day and on 40 working hours per week, to which workers are assumed to be repeatedly exposed, day by day, for a whole working life, without negative effects.
TLV-STEL	(Threshold Limit Value – Short Time Exposition Limit) = concentration to which workers are assumed to be continuously exposed for short time without arisings of irritation, chronic or irreversible tissue damage and reduction of alertness.
MAK	(Maximum Allowed Concentration) = is the maximum concentration of a chemical substance (gases, vapours or airborne particles) in working environment that does not give adverse effects to for a long time exposed people (8 hours daily or 40 weekly hours).
skin	the substance may be absorbed through the skin, included the mucosa.

iii) Main literature references and sources for data:

- Aerosol Directive 1975/324/EC, as amended
- European Parliament Regulation (EC) 1907/2006 (REACH)
- European Parliament Regulation (EC) 1272/2008 (CLP)
- The Merck Index. Ed. 10
- Handling Chemical Safety
- Niosh - Registry of Toxic Effects of Chemical Substances
- INRS - Fiche Toxicologique
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7 Ed., 1989
- ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities
- ACGIH - Threshold Limit Values - 2011 edition
- Supplier Safety Data Sheets.

iv) Classification and procedure used to derive it in compliance with Regulation (EC) 1272/2008 [CLP] in relation to mixtures:

Classification in accordance with (EC) regulation No. 1272/2008	Classification procedure
Aerosol 3, H229	On the basis of experimental data
Skin Irrit. 2, H315	Method of calculation - Opinion of experts
Eye Irrit 2, H319	Method of calculation - Opinion of experts
STOT SE 3, H335	Method of calculation - Opinion of experts

v) The text of the hazard indications (H) mentioned in sections 2-3 of the safety data sheet

Acute Tox. 4	Acute toxicity (oral), hazard category 4
Acute Tox. 2	Acute toxicity in the case of inhalation, hazard category 2
Eye Dam. 1	Serious eye injury, hazard category 1
Eye Irrit. 2	Serious eye injury/eye irritation, hazard category 2
Skin Irrit. 2	Skin corrosion/irritation, hazard category 2
STOT SE 3	Specific target organ toxicity — single exposure:

Aquatic Chronic 2	Hazardous for the aquatic environment, chronic toxicity hazard category 2
Ox. Gas 1	Combustible gas, hazard category 1

H270 - May cause or intensify fire; oxidizer
H302 - Harmful if swallowed
H315 - Causes skin irritation
H318 - Causes serious eye damage
H319 - Causes serious eye irritation
H332 - Harmful if inhaled
H335 - May cause respiratory irritation
H411 - Toxic to aquatic life with long-lasting effects

vi) Indications on training:

Personnel in charge of handling and using the product must be instructed on the specific risks and the safety measures.

Written references: See specific technical instruction indicated on the product.

Technical contact centre: Telephone +39.030.9911855

vii) Further information:

The information contained on this safety data sheet is based on our current knowledge of health, safety and the environment. The purpose of it is to allow the professional user of the product to identify preventive and protective behaviour useful for the purposes of safe operation.

The product user , prior to any use other than the foreseen use, must verify whether other information is required, in any case presuming observance of the pertinent laws and good operating practice.

We will not be liable for any improper use of the product.

The product label or safety data sheet should be presented in the event of any necessary medical treatment.