STARTER QUICK STARTING 200 ml AMBRO-SOL

Dated 25/02/2020

Printed on 25/02/2020

Page n. 1/15

Replaced revision:10 (Dated: 21/02/2019)

Safety Data Sheet

According to Annex II to REACH - Regulation 2015/830

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

1.1. Product identifier

Code: A466

Product name STARTER QUICK STARTING 200 ml AMBRO-SOL

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

Intended use Professional starter quick starting for cars.

Identified Uses	Industrial	Professional	Consumer
Industrial Use		-	-
Professional Use	<u>.</u>	~	-
1.3. Details of the supplier of the safety data	sheet		

Name AMBRO-SOL S.R.L.

Via per Pavone del Mella n.21 Full address District and Country

25020 Cigole (BS)

Italia

Tel. +39 030 9959674 Fax +39 030 959265

e-mail address of the competent person

responsible for the Safety Data Sheet quality@ambro-sol.com

1.4. Emergency telephone number

For urgent inquiries refer to

Centro Antiveleni di Pavia: 0382 24444 (IRCCS Fondazione Maugeri - Pavia) Centro Antiveleni di Bergamo: 800 883300 (Ospedali Riuniti - Bergamo)

Centro Antiveleni di Firenze: 055 7947819 (Ospedale Careggi - Firenze)

Centro Antiveleni di Roma: 06 3054343 (Policlinico Gemelli - Roma)

Centro Antiveleni di Napoli: 081 7472870 (Ospedale Cardarelli - Napoli)

Centro de Información Toxicológica en España: 91 5620420 (Inst. Nacional de Toxicología y Ciencias Forenses)

Centre Antipoison en France: 01 40054848 (Centre Antipoison et de Toxicovigilance de Paris)

Pomorskie Centrum Toksykologii ul. Kartuska 4/6, 80-104 Gdańsk tel./fax: (58) 682 04 04

American Association of Poison Control Centers: +1 (800) 222-1222

Giftkontrollzentrum Berlin, Brandenburg 030 -

19 240

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 (EU) Regulation 2015/830. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Aerosol, category 1 H222 Extremely flammable aerosol.

STARTER QUICK STARTING 200 ml AMBRO-SOL

Revision nr. 11

Dated 25/02/2020
Printed on 25/02/2020

Page n. 2/15

Replaced revision:10 (Dated: 21/02/2019)

H229

Pressurised container: may burst if heated.

Aspiration hazard, category 1

H304

May be fatal if swallowed and enters airways. May cause drowsiness or dizziness.

Specific target organ toxicity - single exposure, category 3 Hazardous to the aquatic environment, chronic toxicity,

H336 H411

Toxic to aquatic life with long lasting effects.

category 2

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:

H222 Extremely flammable aerosol.

H229 Pressurised container: may burst if heated.
 H336 May cause drowsiness or dizziness.
 H411 Toxic to aquatic life with long lasting effects.

Precautionary statements:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P251 Do not pierce or burn, even after use.

P410+P412 Protect from sunlight. Do no expose to temperatures exceeding 50°C / 122°F.

P211 Do not spray on an open flame or other ignition source.

P273 Avoid release to the environment.

P391 Collect spillage.

P102 Keep out of reach of children.

Contains: Pentane

Statements on the aspiration toxicity classification were not included in the label elements, based on section 1.3.3. of Annex I to CLP.

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

SECTION 3. Composition/information on ingredients

STARTER QUICK STARTING 200 ml AMBRO-SOL

Revision nr. 11

Dated 25/02/2020

Printed on 25/02/2020

Page n. 3/15

Replaced revision:10 (Dated: 21/02/2019)

3.2. Mixtures

Contains:

Identification x = Conc. % Classification 1272/2008 (CLP)

Pentane

CAS 109-66-0 47 ≤ x < 51 Flam. Liq. 2 H225, Asp. Tox. 1 H304, STOT SE 3 H336, Aquatic Chronic 2

H411

EC 203-692-4

INDEX 601-006-00-1

Reg. no. 01-2119459286-30

Propane

CAS 74-98-6 31 ≤ x < 35 Flam. Gas 1A H220, Press. Gas (Liq.) H280, Classification note according to

Annex VI to the CLP Regulation: U

EC 200-827-9

INDEX 601-003-00-5

Reg. no. 01-2119486944-21-0046

Butane

CAS 106-97-8 15 ≤ x < 19 Flam. Gas 1A H220, Press. Gas (Liq.) H280, Classification note according to

Annex VI to the CLP Regulation: C U

EC 203-448-7

INDEX 601-004-00-0

Reg. no. 01-2119474691-32-XXXX

Isobutane

CAS 75-28-5 1 ≤ x < 3 Flam. Gas 1A H220, Press. Gas H280

EC 200-857-2

INDEX 601-004-00-0

Reg. no. 01-2119485395-27-XXXX

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

The product is an aerosol containing propellants. For the purposes of calculation of the health hazards, propellants are not considered (unless they have health hazards). The percentages indicated are inclusive of the propellants.

Percentage of propellants: 52,17 %

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 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.

INHĂLATĬON: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately. INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

4.2. Most important symptoms and effects, both acute and delayed

Specific information on symptoms and effects caused by the product are unknown.

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

AMBRO-SOL S.R.L. | Revision nr. 11 | | Dated 25/02/2020 | | Printed on 25/02/2020 | | Page n. 4/15 | | Replaced revision:10 (Dated: 21/02/2019)

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

None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

If overheated, aerosol cans can deform, explode and be propelled considerable distances. Put a protective helmet on before approaching the fire. 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.

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

Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site. Send away individuals who are not suitably equipped. Wear protective gloves / protective clothing / eye protection / face protection.

6.2. Environmental precautions

Do not disperse in the environment.

6.3. Methods and material for containment and cleaning up

Use inert absorbent material to soak up leaked product. 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.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Avoid bunching of electrostatic charges. Do not spray on flames or incandescent bodies. Vapours may catch fire and an explosion may occur; vapour

STARTER QUICK STARTING 200 ml AMBRO-SOL

Revision nr. 11

Dated 25/02/2020

Printed on 25/02/2020

Page n. 5/15

Replaced revision:10 (Dated: 21/02/2019)

accumulation is therefore to be avoided by leaving windows and doors open and ensuring good cross ventilation. Do not eat, drink or smoke during use. Do not breathe spray.

7.2. Conditions for safe storage, including any incompatibilities

Store in a place where adequate ventilation is ensured, away from direct sunlight at a temperature below 50°C / 122°F, away from any combustion sources.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

DEU Deutschland TRGS 900 - Seite 1 von 69 (Fassung 29.03.2019)- Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte ESP España LÍMITES DE EXPOSICIÓN PROFESIONAL PARA AGENTES QUÍMICOS EN ESPAÑA 2019 (INSST) FRA France Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS

GBR United Kingdom EH40/2005 Workplace exposure limits (Third edition, published 2018)

ROZPORZĄDZENIE MINISTRA RODZINY, PRACY I POLITYKI SPOŁECZNEJ z dnia 12 czerwca 2018 r POL Polska

TLV-ACGIH ACGIH 2019

Pentane			
Predicted no-effect concentration - PNEC			
Normal value in fresh water	0,23	mg/l	
Normal value for fresh water sediment	1,2	mg/kg/d	
Normal value for marine water sediment	1,2	mg/kg/d	_
Normal value for water, intermittent release	0,88	mg/l	
Normal value of STP microorganisms	3,6	mg/l	
Normal value for the terrestrial compartment	0,55	mg/kg/d	

Health - Derived no-ef	fect level - DNEL / [OMEL						
	Effects on				Effects on			
	consumers				workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				214 mg/kg bw/d				
Inhalation				643 mg/m3				3000 mg/m3
Skin				214 mg/kg bw/d				432 mg/kg bw/d

Threshold Limit Value	ue						
Туре	Country	TWA/8h		STEL/15min		Remarks / Observations	
		mg/m3	ppm	mg/m3	ppm		
AGW	DEU	1800	1000	7200	4000		
MAK	DEU	1800	1000	7200	4000		
VLA	ESP		1000				
NDS/NDSCh	POL	1800					

Butane

Threshold Limit Value

STARTER QUICK STARTING 200 ml AMBRO-SOL

Revision nr. 11

Dated 25/02/2020

Printed on 25/02/2020

Page n. 6/15

Replaced revision:10 (Dated: 21/02/2019)

Туре	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	2400	1000	9600	4000	
MAK	DEU	2400	1000	9600	4000	
VLA	ESP		1000			Gases
VLEP	FRA	1900	800			
WEL	GBR	1450	600	1810	750	
NDS/NDSCh	POL	1900		3000		
TLV-ACGIH					1000	

Isobutane Threshold Limit Value							
Туре	Country	TWA/8h		STEL/15min		Remarks / Observations	
		mg/m3	ppm	mg/m3	ppm		
TLV-ACGIH			800				

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.

HAND PROTECTION

None required.

SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, a mask with a type AX filter combined with a type P filter should be worn (see standard EN 14387).

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.

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

STARTER QUICK STARTING 200 ml AMBRO-SOL

Revision nr. 11

Dated 25/02/2020
Printed on 25/02/2020

Page n. 7/15

Replaced revision:10 (Dated: 21/02/2019)

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance aerosol
Colour colourless

Odour characteristic of solvent

Odour threshold Not available Not available рΗ Melting point / freezing point Not available Initial boiling point Not available Not available Boiling range < 0 °C Flash point **Evaporation Rate** Not available Flammability of solids and gases flammable gas 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 0,58 g/ml a 20°C Not available Solubility Partition coefficient: n-octanol/water Not available Auto-ignition temperature Not available Decomposition temperature Not available Viscosity Not available Explosive properties not applicable

9.2. Other information

Oxidising properties

VOC (Directive 2010/75/EC): 100,00 % - 580,00 g/litre

not applicable

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

STARTER QUICK STARTING 200 ml AMBRO-SOL

Revision nr. 11

Dated 25/02/2020

Printed on 25/02/2020

Page n. 8/15

Replaced revision:10 (Dated: 21/02/2019)

No hazardous reactions are foreseeable in normal conditions of use and storage.

10.4. Conditions to avoid

Avoid overheating.

10.5. Incompatible materials

Strong reducing or oxidising agents, strong acids or alkalis, hot material.

10.6. Hazardous decomposition products

Information not available

SECTION 11. Toxicological information

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.

11.1. Information on toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

LC50 (Inhalation) of the mixture:
Not classified (no significant component)
LD50 (Oral) of the mixture:
Not classified (no significant component)
LD50 (Dermal) of the mixture:

Not classified (no significant component)

Butane

LC50 (Inhalation) > 1442,738 mg/l/15min rat

STARTER QUICK STARTING 200 ml AMBRO-SOL

Revision nr. 11

Dated 25/02/2020

Printed on 25/02/2020

Page n. 9/15

Replaced revision:10 (Dated: 21/02/2019)

Propane

LC50 (Inhalation) 800000 ppm 15 min

Isobutane

LC50 (Inhalation) > 1442,738 mg/l/15min rat

Pentane

LD50 (Oral) 2000 mg/kg rat

LC50 (Inhalation) 25,3 mg/l/4h rat

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

May cause drowsiness or dizziness

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Toxic for aspiration

STARTER QUICK STARTING 200 ml AMBRO-SOL

Revision nr. 11

Dated 25/02/2020

Printed on 25/02/2020

Page n. 10/15

Replaced revision:10 (Dated: 21/02/2019)

SECTION 12. Ecological information

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

12.1. Toxicity

Butane

LC50 - for Fish > 24,11 mg/l/96h

Propane

LC50 - for Fish 85,82 mg/l/96h EC50 - for Crustacea 41,82 mg/l/48h

Isobutane

LC50 - for Fish > 24,11 mg/l/96h

Pentane

EC50 - for Crustacea 2,7 mg/l/48h Chronic NOEC for Algae / Aquatic Plants 4,549 mg/l

12.2. Persistence and degradability

Propane

Global Warming Potential (GWP): 3. Ozone Depletion Potential (ODP): 0.

Butane

Solubility in water 0,1 - 100 mg/l

Rapidly degradable

Propane

Solubility in water 0,1 - 100 mg/l

Rapidly degradable

Isobutane

Rapidly degradable

12.3. Bioaccumulative potential

Butane

Partition coefficient: n-octanol/water 1,09

Propane

Partition coefficient: n-octanol/water 1,09

12.4. Mobility in soil

Information not available

STARTER QUICK STARTING 200 ml AMBRO-SOL

Revision nr. 11

Dated 25/02/2020

Printed on 25/02/2020

Page n. 11/15

Replaced revision:10 (Dated: 21/02/2019)

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.

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.

Product residues are considered hazardous special waste. Do not dispose of in wastewater.

Empty cylinders, although completely emptied, should not be dispersed in the environment.

The overheated aerosol container at a temperature above 50 °C may burst even if it contains a small gas residue.

Waste transport may be subject to ADR.

Refer to applicable regulations.

European Waste Catalog (contaminated containers):

Aerosol as a household waste is excluded from the application of the above standard.

The exhausted commercial / industrial aerosol can be classified as: 15.01.10 *: packaging containing residues of dangerous or contaminated substances. DO NOT ALLOW PRESSURE, CUT, LOOK, FORK, DISCOVER OR EXPOSE THESE CONTAINERS FOR HEAT, FIRE, FIRE, ELECTROSTATIC DISCHARGES OR OTHER

POWERING SOURCES. Evaporate the last traces before disposing.

SECTION 14. Transport information

14.1. UN number

ADR / RID, IMDG, 1950

IATA:

14.2. UN proper shipping name

ADR / RID: AEROSOLS

IMDG: AEROSOLS (Pentane)

IATA: AEROSOLS, FLAMMABLE

14.3. Transport hazard class(es)

ADR / RID: Class: 2 Label: 2.1



STARTER QUICK STARTING 200 ml AMBRO-SOL

Revision nr. 11

Dated 25/02/2020

Printed on 25/02/2020

Page n. 12/15

Replaced revision:10 (Dated: 21/02/2019)

IMDG: Class: 2 Label: 2.1

IATA: Class: 2 Label: 2.1



14.4. Packing group

ADR / RID, IMDG,

IATA:

14.5. Environmental hazards

ADR / RID: Environmentally

Hazardous

IMDG: Marine Pollutant

IATA: NO

For Air transport, environmentally hazardous mark is only mandatory for UN 3077 and UN 3082.

Cargo:

14.6. Special precautions for user

ADR / RID: HIN - Kemler: --Limited Tunnel

restriction Quantities: 1

code: (D)

Packaging

instructions:

203

Special Provision: -EMS: F-D, S-U IMDG: Limited

Quantities: 1

Maximum

quantity: 150 instructions: 203 Kg Pass.: Packaging

Maximum

quantity: 75

Kg A145, A167, Special Instructions:

A802

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Information not relevant

IATA:

SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EC: P3a-E2

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

Product

40 Point

STARTER QUICK STARTING 200 ml AMBRO-SOL

Revision nr. 11

Dated 25/02/2020
Printed on 25/02/2020

Page n. 13/15

Replaced revision:10 (Dated: 21/02/2019)

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage greater than 0,1%.

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.

15.2. Chemical safety assessment

A chemical safety assessment has been performed for the following contained substances

Butane

SECTION 16. Other information

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

Flam. Gas 1A Flammable gas, category 1A

Aerosol 1 Aerosol, category 1
Aerosol, category 3

Flam. Liq. 2 Flammable liquid, category 2

Press. Gas (Liq.) Liquefied gas
Press. Gas Pressurised gas

Asp. Tox. 1 Aspiration hazard, category 1

STOT SE 3 Specific target organ toxicity - single exposure, category 3

Aquatic Chronic 2 Hazardous to the aquatic environment, chronic toxicity, category 2

H220 Extremely flammable gas.H222 Extremely flammable aerosol.

H229 Pressurised container: may burst if heated.H225 Highly flammable liquid and vapour.

H280 Contains gas under pressure; may burst if heated.

STARTER QUICK STARTING 200 ml AMBRO-SOL

Revision nr. 11

Dated 25/02/2020

Printed on 25/02/2020

Page n. 14/15

Replaced revision:10 (Dated: 21/02/2019)

H304 May be fatal if swallowed and enters airways.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

I EGEND.

- 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. Regulation (EC) 1907/2006 (REACH) of the European Parliament
- 2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
- 3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament

- Regulation (EU) 2015/830 of the European Parliament
 Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
 Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
- 7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
- 8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament 9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
- 10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
- 11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
- 12. Regulation (EU) 2016/1179 (IX Atp. CLP)
- 13. Regulation (EU) 2017/776 (X Atp. CLP)
- 14. Regulation (EU) 2018/669 (XI Atp. CLP)
- 15. Regulation (EU) 2018/1480 (XIII Atp. CLP)
- 16. Regulation (EU) 2019/521 (XII Atp. CLP)
- The Merck Index. 10th Edition
- Handling Chemical Safety
- INRS Fiche Toxicologique (toxicological sheet)
- Patty Industrial Hygiene and Toxicology
- N.I. Sax Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals Ministry of Health and ISS (Istituto Superiore di Sanità) Italy

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.

AMBRO-SOL S.R.L. Revision nr. 11 Dated 25/02/2020 Printed on 25/02/2020 Page n. 15/15 Replaced revision:10 (Dated: 21/02/2019)

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. Product's classification is based on the calculation methods set out in Annex I of the CLP Regulation, unless otherwise indicated in sections 11 and 12. The data for evaluation of chemical-physical properties are reported in section 9.
Changes to previous review:
The following sections were modified: 02 / 03 / 04 / 05 / 08 / 09 / 10 / 11 / 12 / 14 / 15 / 16.