



## **SAFETY DATA SHEET**

### **Details of the supplier of the safety data sheet**

#### **Supplier identification**

Imperity Professional Milano Kft.  
Balatoni Str. 2/a. B/1., 1112 Budapest, Hungary  
Tel./fax: 06703114806

#### **Responsible for MSDS:**

Imperity Professional Milano Kft.  
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E-mail: [senior.majerik@imperity.it](mailto:senior.majerik@imperity.it)

### **Emergency telephone number in Hungary**

**Emergency telephone** (07-15.20 h): +36 34304414 (CET) on workdays

#### **Health Toxicological Information Service**

(ETTSZ H-1096 Budapest, Nagyváradi tér 2.)

**Tel.:** +36 1 476 6464, or +36 80 201 199

# Safety data sheet

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

### 1.1. Product identifier

Code: 707861  
Product name IMPLEX Bond Amplifier (Phase 2) 200ml IP

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

Identified Uses	Industrial	Professional	Consumer
Cosmetic Professiona Use	-		-
Cosmetic no professional Use	-	-	

### 1.3. Details of the supplier of the safety data sheet

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Emergency telephone (07-1520 h): +36 34304414 (CET) on workdays  
Health Toxicological Information Service (ETTSZ H-1096 Budapest, Nagyváradi tér 2.)  
Tel.: +36 1 476 6464, or +36 80 201 199  
National Health Toxicological Information Service:

## 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.

Hazard classification and indication:

Skin sensitization, category 1	H317	May cause an allergic skin reaction.
Hazardous to the aquatic environment, chronic toxicity, category 3	H412	Harmful to aquatic life with long lasting effects.

### 2.2. Label elements.

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.



Signal words: Warning

Hazard statements:

**H317** May cause an allergic skin reaction.  
**H412** Harmful to aquatic life with long lasting effects.

Precautionary statements:

**P272** Contaminated work clothing should not be allowed out of the workplace.  
**P273** Avoid release to the environment.  
**P280** Wear protective gloves.  
**P302+P352** IF ON SKIN: wash with plenty of water  
**P333+P313** If skin irritation or rash occurs: Get medical advice / attention.  
**P362+P364** Take off contaminated clothing and wash it before reuse.

**Contains:** Miscela di: 5-cloro-2-metil-2H-isotiazol-3-one [EC no. 247-500-7]; 2-metil-2H-isotiazol-3-one [EC no. 220-239-6] (3:1)

### 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.

### 3.1. Substances.

Information not relevant.

### 3.2. Mixtures.

Contains:

Identification.	Conc. %.	Classification 1272/2008 (CLP).
<b>Cetrimonium Chloride</b>		
CAS. 112-02-7	1 - 2,5	Acute Tox. 3 H311, Acute Tox. 4 H302, Skin Corr. 1C H314, Aquatic Acute 1 H400 M=10, Aquatic Chronic 1 H410
EC. 203-928-6		
INDEX. -		
Reg. no. 01-2119970558-23		
<b>Methoxy PEG/PPG-7/3 Aminopropyl Dimethicone</b>		
CAS. 298211-68-4	0,1 - 1	Aquatic Chronic 2 H411
EC. -		
INDEX. -		
<b>ACETIC ACID</b>		


CAS. 64-19-7

0 - 0,1

Flam. Liq. 3 H226, Skin Corr.  
1A H314, Note B

EC. 200-580-7

INDEX. 607-002-00-6

**Miscela di: 5-cloro-2-metil-2H-isotiazol-3-one [EC no. 247-500-7]; 2-metil-2H-isotiazol-3-one [EC no. 220-239-6] (3:1)**

CAS. 55965-84-9

0,0015 - 0,025

Acute Tox. 3 H301, Acute  
Tox. 3 H311, Acute Tox. 3  
H331, Skin Corr. 1B H314,  
Skin Sens. 1 H317, Aquatic  
Acute 1 H400 M=10, Aquatic  
Chronic 1 H410 M=10

EC. -

INDEX. 613-167-00-5

Note: Upper limit is not included into the range.

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

## 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

Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

#### 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.

Block the leakage if there is no hazard.

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.

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

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 safehandling.

Ensure that there is an adequate earthing system for the equipment and personnel. Avoid contact with eyes and skin. Do not breathe powders, vapours or mists. Do not eat, drink or smoke during use. Wash hands after use. Avoid leakage of the product into the environment.

### 7.2. Conditions for safe storage, including anyincompatibilities.


Store only in the original container. Store in a ventilated and dry place, far away from sources of ignition. Keep containers well sealed. Keep the product in clearly labelled containers. Avoid overheating. Avoid violent blows. 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:

BGR	България	МИНИСТЕРСТВО НА ТРУДА И СОЦИАЛНАТА ПОЛИТИКА МИНИСТЕРСТВО НА ЗДРАВЕОПАЗВАНЕТО НАРЕДБА No 13 от 30 декември 2003 г
DEU	Deutschland	MAK-und BAT-Werte-Liste 2012
ESP	España	INSHT - Límites de exposición profesional para agentes químicos en España 2015
FRA	France	JORF n°0109 du 10 mai 2012 page 8773 texte n° 102
GRC	Ελλάδα	ΕΦΗΜΕΡΙΣ ΤΗΣ ΚΥΒΕΡΝΗΣΕΩΣ -ΤΕΥΧΟΣ ΠΡΩΤΟ Αρ. Φύλλου 19 -9 Φεβρουαρίου 2012
HUN	Magyarország	50/2011. (XII. 22.) NGM rendelet a munkahelyek kémiai biztonságáról
LTU	Lietuva	DĖL LIETUVOS HIGIENOS NORMOS HN 23:2007 CHEMINIŲ
POL	Polska	MEDŹIAGŲ 2007 m. spalio 15 d. Nr. V-827/A1-287
EU	OEL EU	ROZPORZĄDZENIE MINISTRA PRACY I POLITYKI SPOŁECZNEJ z dnia 16 grudnia 2011r
	TLV-ACGIH	Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC. ACGIH 2014

Cetrimonium Chloride								
Predicted no-effect concentration - PNEC.								
Normal value in fresh water			0,00068		mg/l			
Normal value in marine water			0,000068		mg/l			
Normal value for fresh water sediment			9,27		mg/kg			
Normal value for marine water sediment			0,927		mg/l			
Normal value of STP microorganisms			0,4		mg/l			
Health - Derived no-effect level - DNEL /DMEL								
Route of exposure	Effects on consumers.	Acute systemic	Chronic local	Chronic systemic	Effects on workers	Acute systemi	Chronic local	Chronic systemic
	Acute local				Acute local			
Oral.			VND	2,83 mg/kg				
Inhalation.			VND	0,98 mg/m3			VND	3,32 mg/m3
Skin.			VND	2,83 mg/kg bw/d			VND	4,7 mg/kg

ACETIC ACID					
Threshold Limit Value.					
Type	Country	TWA/8h	ppm	STEL/15min	ppm
		mg/m3		mg/m3	
TLV	BGR	25		37	
AGW	DEU	25	10	50	20


MAK	DEU	25	10	50	20
VLA	ESP	25	10	37	15
VLEP	FRA			25	10
TLV	GRC	25	10	37	15
AK	HUN	25		25	
RD	LTU	25	10		
NDS	POL	15		30	
OEL	EU	25	10		
TLV-ACGIH		25	10	37	15

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. 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.

**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, use a mask with a type B filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (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.

**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.

**SECTION 9. Physical and chemical properties.**


#### 9.1. Information on basic physical and chemical properties.

Appearance	creamy
Colour	white
Odour	characteristic
Odour threshold.	Not available.
pH.	4.5 - 5.0
Melting point / freezing point.	Not available.
Initial boiling point.	Not available.
Boiling range.	Not available.
Flash point.	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	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.	0,964 Kg/l
Solubility	soluble in water
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature.	Not available.
Decomposition temperature.	Not available.
Viscosity	15000 - 22000 cps (22°, G6, 12rpm)
Explosive properties	Not available.
Oxidising properties	Not available.

#### 9.2. Other information.

VOC (Directive 2010/75/EC) :	0,01 % - 0,10 g/litre.
VOC (volatile carbon) :	< 0.01 % - 0,04 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.

#### 10.2. Chemical stability.

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

#### 10.3. Possibility of hazardous reactions.

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

ACETIC ACID: risk of explosion on contact with: chromium (IV) oxide, potassium permanganate, sodium peroxide, perchloric acid, phosphorus chloride, hydrogen peroxide. Can react dangerously with: alcohols, bromine pentafluoride, chlorosulphuric acid, dichromate-sulphuric acid, ethane diamine, ethylene glycol, potassium hydroxide, strong bases, sodium hydroxide, strong oxidising agent, nitric acid, ammonium nitrate, potassium tert-butoxide, oleum. Forms explosive mixtures with air.

#### 10.4. Conditions to avoid.




None in particular. However the usual precautions used for chemical products should be respected.

ACETIC ACID: avoid exposure to sources of heat and naked flames.

**10.5. Incompatible materials.**

ACETIC ACID: carbonates, hydroxides, many oxides and phosphates. Oxidising substances and bases.

**10.6. Hazardous decomposition products.**

Information not available.

**SECTION 11. Toxicological information.**

Leggermente irritante - non sussiste obbligo di etichettatura.

**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.  
 Upon contact with skin, this product causes sensitization (dermatitis). Dermatitis derives from skin irritation on the areas which repeatedly come into contact with the sensitizing agent. Cutaneous lesions may include: erythemas, edemas, papules, vesicles, pustules, scurvies, ulcerations and exudative phenomena, whose intensity varies according to illness seriousness and affected areas. Erythemas, edemas and exudative phenomena prevail during the acute phase. Scurfy skin, dryness, ulcerations and skin thickening prevail during the chronic phase.

Miscela di: 5-cloro-2-metil-2H-isotiazol-3-one [EC no. 247-500-7]; 2-metil-2H-isotiazol-3-one [EC no. 220-239-6] (3:1)  
 LD50 (Oral).> 457 mg/kg rat  
 LD50 (Dermal).> 660 mg/kg rabbit

Cetrimonium Chloride  
 LD50 (Oral).1550 mg/kg Metodo: Linee Guida 401 per il Test dell'OECD  
 LD50 (Dermal).1821 mg/kg metodo di calcolo

ACETIC ACID  
 LD50 (Oral).3310 mg/kg Rat  
 LD50 (Dermal).1060 mg/kg Rabbit  
 LC50 (Inhalation).11,4 mg/l/4h Rat

Cetearyl Alcohol 50/50  
 LD50 (Oral).> 2000 mg/kg

Methoxy PEG/PPG-7/3 Aminopropyl Dimethicone  
 LD50 (Oral).> 2000 mg/kg Rat

**SECTION 12. Ecological information.**

This product is dangerous for the environment and the aquatic organisms. In the long term, it have negative effects on aquatic environment.  
 Il prodotto è considerato essere un inquinante dell'acqua. (Legislazione Tedesca).  
 Impedire la penetrazione nel terreno, nelle acque di superficie e nelle fognature.

**12.1. Toxicity.**

Miscuglio di 5-cloro-2-metil-


2H isotiazolo-3-one (CAS 26172-55-4) e di 2-metil-2Hisotiazolo-3-one (CAS 2682-20-4)  
Tossicità per i batteri : CE50: 1.800 mg/l, OECD 209

Miscela di: 5-cloro-2-metil-2H-isotiazol-3-one [EC no. 247-500-7]; 2-metil-2H-isotiazol-3-one [EC no. 220-239-6] (3:1)	
LC50 - for Fish.	0,28 mg/l/96h
EC50 - for Crustacea.	0,16 mg/l/48h
EC50 - for Algae / Aquatic Plants.	0,018 mg/l/72h
Cetrimonium Chloride	
LC50 - for Fish.	> 0,7 mg/l/96h
EC50 - for Algae / Aquatic Plants.	0,08 mg/l/72h
EC10 for Algae / Aquatic Plants.	0,104 mg/l/72h
Methoxy PEG/PPG-7/3 Aminopropyl Dimethicone	
LC50 - for Fish.	6,8 mg/l/96h
EC50 - for Crustacea.	2,53 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants.	2,95 mg/l/72h Scenedesmus subspicatus

12.2. Persistence and degradability.

Miscela di: 5-cloro-2-metil-2H-isotiazol-3-one [EC no. 247-500-7]; 2-metil-2H-isotiazol-3-one [EC no. 220-239-6] (3:1)  
Rapidly biodegradable.

Cetrimonium Chloride  
Rapidly biodegradable.

ACETIC ACID  
Solubility in water. > 10000 mg/l  
Rapidly biodegradable.

Methoxy PEG/PPG-7/3  
Aminopropyl Dimethicone  
NOT rapidly biodegradable.

12.3. Bioaccumulative potential.


Miscela di: 5-cloro-2-metil-2H-isotiazol-3-one [EC no. 247-500-7]; 2-metil-2H-isotiazol-3-one [EC no. 220-239-6] (3:1)	
Partition coefficient: n-octanol/water.	> 0,401
ACETIC ACID	
Partition coefficient: n-octanol/water.	-0,17
<b>12.4. Mobility in soil.</b>	
ACETIC ACID	
Partition coefficient: soil/water.	1,153
<b>12.5. Results of PBT and vPvB assessment.</b>	
On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.	
<b>12.6. Other adverse effects.</b>	
Information not available.	

## SECTION 13. Disposal considerations.

<b>13.1. Waste treatment methods.</b>
Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations. Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations. CONTAMINATED PACKAGING Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

## SECTION 14. Transport information.

<b>14.1. UN number.</b>
Not applicable.
<b>14.2. UN proper shipping name.</b>
Not applicable.
<b>14.3. Transport hazard class(es).</b>


Not applicable.

**14.4. Packing group.**

Not applicable.

**14.5. Environmental hazards.**

Not applicable.

**14.6. Special precautions for user.**

Not applicable.

**14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code.**

Information not relevant.

**SECTION 15. Regulatory information.**

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

<u>Seveso category.</u>	Cosmetic product, not relevant
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Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006.

<u>Product.</u>	
Point.	3

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.

**15.2. Chemical safetyassessment.**

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

**SECTION 16. Other information.**

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

<b>Flam. Liq. 3</b>	Flammable liquid, category 3
<b>Acute Tox. 3</b>	Acute toxicity, category 3
<b>Acute Tox. 4</b>	Acute toxicity, category 4
<b>Skin Corr. 1A</b>	Skin corrosion, category 1A
<b>Skin Corr. 1B</b>	Skin corrosion, category 1B
<b>Skin Corr. 1C</b>	Skin corrosion, category 1C
<b>Skin Sens. 1</b>	Skin sensitization, category 1
<b>Aquatic Acute 1</b>	Hazardous to the aquatic environment, acute toxicity, category 1
<b>Aquatic Chronic 1</b>	Hazardous to the aquatic environment, chronic toxicity, category 1
<b>Aquatic Chronic 2</b>	Hazardous to the aquatic environment, chronic toxicity, category 2
<b>Aquatic Chronic 3</b>	Hazardous to the aquatic environment, chronic toxicity, category 3
<b>H226</b>	Flammable liquid and vapour.
<b>H301</b>	Toxic if swallowed.
<b>H311</b>	Toxic in contact with skin.
<b>H331</b>	Toxic if inhaled.
<b>H302</b>	Harmful if swallowed.
<b>H314</b>	Causes severe skin burns and eye damage.
<b>H317</b>	May cause an allergic skin reaction.
<b>H400</b>	Very toxic to aquatic life.
<b>H410</b>	Very toxic to aquatic life with long lasting effects.
<b>H411</b>	Toxic to aquatic life with long lasting effects.
<b>H412</b>	Harmful to aquatic life with long lasting effects.

- 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. Regulation (EU) 1907/2006 (REACH) of the European Parliament
  2. Regulation (EU) 1272/2008 (CLP) of the European Parliament
  3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
  4. Regulation (EU) 2015/830 of the European Parliament
  5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
  6. 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
- 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
  - 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.