SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1	**Product**	**Affinage Infiniti Lite Blonde+ 500G**
1.2	**Proper shipping name**	Oxidizing Solid, Corrosive, N.O.S (Sodium Silicate, Ammonium Peroxydisulphate)
1.3	**Recommended use**	Hair Bleaching Powder (for cosmetic use)
1.4	**Supplier**	International Hair Cosmetics Group Pty Ltd / Affinage 14 India St (Cnr Tombo Street), Capalaba, QLD 4157
1.5	**Telephone number**	61 7 3823 4566 (Weekdays 9.00 am to 5.00 pm)

SECTION 2: HAZARDS IDENTIFICATION

2.1 **Hazard classification and indication** UN 3085 Class 5.1 (8)

This 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.

Oxidising solid, category 3	H272: May intensify fire; oxidiser.
Acute toxicity, category 4	H302: Harmful if swallowed.
Skin corrosion, category 1B	H314: Causes severe skin burns and eye damage.
Serious eye damage, category 1	H318: Causes serious eye damage.
Specific target organ toxicity - single exposure, category 3	H335: May cause respiratory irritation.
Respiratory sensitization, category 1	H334: May cause allergy or asthma symptoms or breathing
Skin sensitization, category 1	H317: May cause an allergic skin reaction.

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

H272: May intensify fire; oxidiser.
H302: Harmful if swallowed.
H314: Causes severe skin burns and eye damage.
H335: May cause respiratory irritation.
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317: May cause an allergic skin reaction.

Precautionary statements

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P220: Keep away from clothing and other combustible materials.
P260: Do not breathe dust / fume / gas / mist / vapours / spray.
P264: Wash…thoroughly after handling.
P280: Wear protective gloves / clothing and eye / face protection.
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water (or shower).

P304 + P340: IF INHALED: remove person to fresh air and keep comfortable for breathing.
P305+P351+P338: IN IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310: Immediately call a POISON CENTER / doctor / …

Contains:
DISODIUM METASILICATE
SODIUM SILICATE
DIPOTASSIUM PEROXODISULPHATE
AMMONIUM PEROXYDISULPHATE

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:

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

Chemical Name/Identification	CAS	x = Conc. %	Classification 1272/2008 (CLP)
Dipotassium Peroxodisulphate EC 231-781-8 INDEX 016-061-00-1 Reg.No. 01-2119495676-19-0000	7727-21-1	25 ≤ x < 50	Ox. Sol. 3 H272, Acute Tox.4 H302, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Resp. Sens. 1 H334, Skin Sens. 1 H317
Sodium Silicate EC 215-687-4 INDEX - Reg.No. 01-2119448725-31-0011	1344-09-8	10 ≤ x < 25	Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335
AMMONIUM PEROXYDISULPHATE EC 231-786-5 INDEX 016-060-00-6 Reg.No. 01-2119495973-19-0000	7727-54-0	5 ≤ x < 10	Ox. Sol. 3 H272, Acute Tox.4 H302, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Resp. Sens. 1 H334, Skin Sens. 1 H317
DISODIUM METASILICATE EC 229-912-9 INDEX 014-010-00-8 Reg.No. 01-2119449811-37-xxxx	6834-92-0	5 ≤ x < 10	Met. Corr. 1 H290, Skin Corr. 1B H314, STOT SE 3 H335

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

4.3 Indication of any immediate medical attention and special treatment needed
Information not available.

SECTION 5: FIRE FIGHTING MEASURES

5.1 Suitable Extinguishing Media — Extinguishing substances are: carbon dioxide and 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 Media — 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
If large quantities of the product are involved in a fire, they can make it considerably worse. Do not breathe combustion products.

5.3 Advice for Fire fighters - General Information — In the case of fire, use jets of water to cool the containers to prevent the risk of explosions (product decomposition and excess pressure) and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Remove all containers containing the product from the fire, if it is safe to do so.

Special protective equipment for fire-fighters	Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

If there are no contraindications, spray powder with water to prevent the formation of dust. 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 and place it in containers for recovery or disposal. If the product is flammable, use explosion-proof equipment. If there are no contraindications, use jets of water to eliminate product residues.
Make sure the leakage site is well aired. Evaluate the compatibility of the container to be used, by checking section 10. 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

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 any incompatibilities

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.
Store in cool (below 30°C) and dry areas. Avoid contamination and avoid the presence of reducing agents like lotions and permanent waves. Discard any unused mixture with developer or bleaching lotions, since the container may break. AVOID humid organic material as paper towel, wood, clothes etc. which could induce spontaneous combustion. Protect from heat and sunlight; store in places far from rain and humidity; never store outdoors. Store separately from other dangerous and incompatible substances.

7.3 Specific end use(s)

Information not available

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Regulatory References: TLV-ACGIH ACGIH 2016

DIPOTASSIUM PEROXODISULPHATE

Predicted no-effect concentration - PNEC

Normal value in fresh water	0.0763 mg/l
Normal value in marine water	0.011 mg/l
Normal value for fresh water sediment	0.275 mg/kg
Normal value for marine water sediment	0.0396 mg/kg
Normal value for water, intermittent release	0.763 mg/l
Normal value of STP microorganisms	3.6 mg/l
Normal value for the terrestrial compartment	0.015 mg/kg

Health - Derived no-effect level - DNEL/DMEL

Route of Exposure	Effects on consumers Acute local	Acute systemic	Chronic local	Chronic systemic	Effects on workers Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		30 mg/kg bw/d		9.1 mg/kg bw/d				
Inhalation	295 mg/m3	295 mg/m3	1.03 mg/m3	1.03 mg/m3		590 mg/m3	2.06 mg/m3	2.06 mg/m3
Skin	1,124 mg/cm2	200 mg/kg bw/d	0.051 mg/cm2	9.1 mg/kg bw/d	2.248 mg/cm2	400 mg/kg bw/d	0.102 mg/cm2	18.2 mg/kg bw/d

SODIUM SILICATE

Predicted no-effect concentration - PNEC	
Normal value in fresh water	7.5mg/l
Normal value for marine water sediment	1 mg/l
Normal value for water, intermittent release	7.5mg/l
Normal value of STP mircoorganisms	348mg/l

Health - Derived no-effect level - DNEL/DMEL

Route of Exposure	Effects on consumers Acute local	Acute systemic	Chronic local	Chronic systemic	Effects on workers Acute local	Acute systemic	Chronic local	Chronic systemic
Oral			VND	0.80 mg/kg bw/d				
Inhalation			VND	1.38 mg/m3			VND	5.61 mg/m3
Skin			VND	0.8 mg/kg bw/d			VND	1.59 mg/kg bw/d

AMMONIUM PEROXYDISULPHATE

Threshold Limited Value

Type	Country	TWA/8h mg/m3	ppm	STEL/15min mg/m3	ppm
VLA	ESP	0.1			
TLV-ACGIH		0.1			

Predicted no-effect concentration - PNEC	
Normal value in fresh water	0.0763 mg/l
Normal value in marine water	0.011 mg/l
Normal value for fresh water sediment	0.275 mg/kg
Normal value for marine water sediment	0.0396 mg/kg
Normal value for water, intermittent release	0.763 mg/l
Normal value of STP microorganisms	3.6 mg/l
Normal value for the terrestrial compartment	0.015 mg/kg

Health - Derived no-effect level - DNEL/DMEL

Route of Exposure	Effects on consumers Acute local	Acute systemic	Chronic local	Chronic systemic	Effects on workers Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		30 mg/kg bw/d		9.1 mg/kg bw/d				
Inhalation	295 mg/m3	295 mg/m3	1.03 mg/m3	1.03 mg/m3		590 mg/m3	2.06 mg/m3	2.06 mg/m3
Skin	1.124 mg/cm2	200 mg/kg bw/d	0.051 mg/cm2	9.1 mg/kg bw/d	2.248 mg/cm2	400 mg/kg bw/d	0.102 mg/cm2	18.2 mg/kg bw/d

DISODIUM METASILICATE

Health - Derived no-effect level - DNEL / DMEL

Route of Exposure	Effects on consumers Acute local	Acute systemic	Chronic local	Chronic systemic	Effects on workers Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				0.74 mg/kg bw/d				
Inhalation				1.55 mg/m3		6.22		6.22 mg/m3
Skin				0.74 mg/kg bw/d				1.49 mg/kg bw/d

LEGEND:

(C) = CEILING INHAL = Inhalable Fraction RESP = Respirable Fraction THORA = Thoracic Fraction

VND = hazard identified but no DNEL/PNEC available NEA = no exposure expected NPI = no hazard identified

During the risk assessment process, it is essential to take into consideration the ACGIH occupational exposure levels for inert particulate not otherwise classified (PNOC respirable fraction: 3 mg/m3; PNOC inhalable fraction: 10 mg/m3). For values above these limits, use a P type filter, whose class (1, 2 or 3) must be chosen according to the outcome of risk assessment.

8.2 Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration. When choosing personal protective equipment, ask your chemical substance supplier for advice. Personal protective equipment must be CE marked, showing that it complies with applicable standards. Provide an emergency shower with face and eye wash station.

HAND PROTECTION	In the case of prolonged contact with the product, protect the hands with penetration-resistant work gloves (see standard EN 374). Work glove material must be chosen according to the use process and the products that may form. Latex gloves may cause sensitivity reactions.
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). In the presence of risks of exposure to splashes or squirts during work, adequate mouth, nose and eye protection should be used to prevent accidental absorption.
RESPIRATORY PROTECTION	Use a type P filtering facemask, whose class (1, 2 or 3) and effective need, must be defined according to the outcome of risk assessment (see standard EN 149).
ENVIRONMENTAL EXPOSURE CONTROLS	The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Powder
Colour	Blue
Odour	Characteristic
Odour threshold	Not available.
pH	10.5 - 11.5
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	Not available.
Solubility	Not available.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Explosive properties	Not available.
Oxidising properties	Not available.

9.2 Other information

Information not available

SECTION 10: STABILITY AND REACTIVITY

10.1	**Reactivity**	There are no particular risks of reaction with other substances in normal conditions of use. DISODIUM METASILICATE The aqueous solutions act as: strong bases.
10.2	**Chemical stability**	The product is stable in normal conditions of use and storage.
10.3	**Possibility of hazardous reactions**	The powders are potentially explosive when mixed with air. DISODIUM METASILICATE May react dangerously with: fluorine, lithium.
10.4	**Conditions to avoid**	Avoid environmental dust build-up.
10.5	**Incompatible materials**	DISODIUM METASILICATE The aqueous solution is incompatible with: acids, organic anhydrides, acrilates, alcohols, aldehydes, alkyl oxides, cresoles, caprolactam, epichlorohydrin, ethylene dichloride, glycols, isocyanates, ketones, nitrates, phenoles, vinyl acetate.
10.6	**Hazardous decomposition products**	Information not available.

SECTION 11: TOXICOLOGICAL INFORMATION

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 - vapours) of the mixture:	Not classified (no significant component)
LC50 (Inhalation - mists/powders) of the mixture:	Not classified (no significant component)
LD50 (Oral) of the mixture:	1187 mg/kg
LD50 (Dermal) of the mixture:	Not classified (no significant component)

SODIUM SILICATE
3400 mg/kg
LD50 (Oral)
> 5000 mg/kg
LD50 (Dermal)
> 2.06 g/m3
LC50 (Inhalation)

DIPOTASSIUM PEROXODISULPHATE
1130 mg/kg
LD50 (Oral)
> 10000 mg/kg
LD50 (Dermal)
> 42.9 mg/l
LC50 (Inhalation)

DISODIUM METASILICATE
1152 mg/kg bw
LD50 (Oral)
> 5000 mg/kg bw
LD50 (Dermal)
> 2.06 g/m3
LC50 (Inhalation)

AMMONIUM PEROXYDISULPHATE
272mg/kg
LD50 (Oral)
> 2000 mg/kg
LD50 (Dermal)
> 5.1 mg/l/4h
LC50 (Inhalation)

SKIN CORROSION / IRRITATION	Corrosive for the skin
SERIOUS EYE DAMAGE / IRRITATION	Causes serious eye damage
RESPIRATORY OR SKIN SENSITISATION	Sensitising for the skin. Sensitising for the respiratory system.
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 respiratory irritation.
STOT - REPEATED EXPOSURE	Does not meet the classification criteria for this hazard class.
ASPIRATION HAZARD	Does not meet the classification criteria for this hazard class.

SECTION 12: ECOLOGICAL INFORMATION

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1 Toxicity

SODIUM SILICATE	
LC50 - for fish	1108 mg/l/96h (Brachydanio rerio)
EC50 - for crustacea	1700 mg/l/48h (Daphnia magna)
DIPOTASSIUM PEROXODISULPHATE	
LC50 - for fish	107.6 mg/l/96h Scophthalmus maximus
EC50 - for crustacea	120 mg/l/48h (Daphnia)
EC50 - for Algae / Aquatic Plants	320 mg/l/72h Phaeodactylum
DISODIUM METASILICATE	
LC50 - for fish	1108 mg/l/96h (Brachydanio rerio)
EC50 - for crustacea	1700 mg/l/48h (Daphia magna)
EC50 - for Algae / Aquatic Plants	207 mg/l/72h (Schenedesmus subspicatus)
AMMONIUM PEROXYDISULPHATE	
LC50 - for fish	107.6 mg/l/96h Scophthalmus maximus
EC50 - for crustacea	120 mg/l/48h (Daphnia magna)
EC50 - for Algae / Aquatic Plants	320 mg/l/72h Phaeodactylum
EC10 - for Algae / Aquatic Plants	36 mg/l/72h Pseudomonas putida

12.2 Persistance and degradabilty

DIPOTASSIUM PEROXODISULPHATE	Rapidly biodegradable
DISODIUM METASILICATE	
Solubility in water	210000 mg/l
Biodegradability	Information not available.
AMMONIUM PEROXYDISULPHATE	
Solubility in water	>10000 mg/l
Biodegradability	Information not available.

12.3 Bioaccumulative potential — Information not available.

12.4 Mobility in soil — Information not available.

12.5 Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0.1%

12.6 Other adverse effects — Information not available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations. Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations. Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

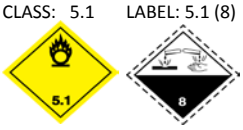
Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number — ADR / RID, IMDG, IATA: 3085

14.2 UN Proper shipping name — ADR / RID, IMDG, IATA: OXIDIZING SOLID, CORROSIVE, N.O.S.

14.3 Transport hazard class(s) — ADR / RID, IMDG, IATA: CLASS: 5.1 LABEL: 5.1 (8)



14.4 Packing group — ADR / RID, IMDG, IATA: III

14.5 Environmental hazards

ADR / RID:	NO
IMDG	NO
IATA	NO

14.6 Special precautions for user

ADR / RID:	HIN - Kemler: 58 Special Provision: -	Limited Quantities: 5 kg	Tunnel restriction code: (E)
IMDG:	EMS: F-A, S-Q	Limited Quantities: 5 kg	
IATA:	Cargo: Pass: Special Instructions:	Maximum Quantity: 100 Kg Maximum Quantity: 25 Kg A3	Packaging Instructions: 563 Packaging Instructions: 559

14.7 Transport in bulk according to Annex II of Marpol 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.
Seveso Category - Directive 2012/18/EC: P8
Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006
Contained substance

Point	65	AMMONIUM PEROXYDISULPHATE Reg. no.: 01-2119495973-19-0000

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 — 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.

Ox. Sol. 3	Oxidising solid, category 3
Met. Corr. 1	Substance or mixture corrosive to metals, category 1
Acute Tox. 4	Acute toxicity, category 4
Skin Corr. 1B	Skin corrosion, category 1B
Eye Dam. 1	Serious eye damage, category 1
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Resp. Sens. 1	Respiratory sensitization, category 1
Skin Sens. 1	Skin sensitization, category 1
H272	May intensify fire; oxidiser
H290	May be corrosive to metals
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H319	Causes serious eye irritation
H315	Causes skin irritation
H335	May cause respiratory irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.

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 (EC) 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
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII 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
IFA GESTIS website
ECHA website
Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanita) - Italy

Issue Date: 9th May 2017
Version: Version 1

Note for Users:
The information contained in the present sheet is based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided informaion 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.

End of SDS