



## Safety data sheet

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

#### 1.1. Product identifier

Product name **ALGINMAJOR-ALGINMAX-ALGINKID-ALGENIUX-ALGINPLUS**

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

Intended use **Alginate for dental impressions - ISO 21563:2013 === GMDN 35863 ===== MEDICAL DEVICE DIRECTIVE 93/42/EEC (Class I)**

Identified Uses	Industrial	Professional	Consumer
Dental medical device	-	SU: 10. ERC: 2, 3. PROC: 1, 3, 5. PC: 32.	-

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

Name **MAJOR PRODOTTI DENTARI S.P.A**  
Full address **Via Einaudi, 23**  
District and Country **10024 Moncalieri (TO)**  
**Italy**  
Tel. **011 6400211**  
Fax **011 6400222**

e-mail address of the competent person responsible for the Safety Data Sheet **sds@majordental.com**

Product distribution by **Major Prodotti Dentari S.p.A.**

#### 1.4. Emergency telephone number

For urgent inquiries refer to

**Austria(+43) 1 406 43 43**  
**Belgium(+32) 070 245 245**  
**Bulgaria (+359) 2 9154 233**  
**Croazia(+385) 1 23-48-342**  
**Czech Republik(+420) 224 919 293, 224 915 402**  
**Denmark(+45) 82 12 12 12**  
**EstoniaLocal 16662 Internat. (+372) 626 93 90**  
**Finland(+358) (09) 471 977 (direct) or (09) 4711 (exchange)**  
**France(+ 33) (0)1 45 42 59 59**  
**Germany: Berlin (+49) 030 19240; Bonn (+49) 0228 19240;Erfurt (+49) 0361 730 730;Freiburg (+49) 0761 19240; Göttingen (+49) 0551 19240; Homburg (+49) 06841 19240; Mainz (+49) 06131 19240; München (+49) 089 19240**  
**Greece(+30) 21 07 79 37 77**  
**Hungary(+36) (06-80) 201199**  
**Iceland(+354) 543 2222**  
**Latvia(+371) Valsts ugunsdzesibas un glabšanas dienests: 112. Valsts Toksikologijas centrs, Saindesanas un zalu informacijas centrs, Tel. 67042473**  
**Luxembourg 112**  
**Lithuania (+370) 5 236 20 52 or 687 53378**  
**Malta(+356) 2545 6504**  
**Netherlands: Uitsluitend bestemd omartsen te informeren bij accidentele vergiftigingen/Only for the purpose of informing medical personnel in cases of accidental intoxications (+31) 030 2748888**  
**Norway(+47) 22 59 13 00**  
**Portugal (+351) 808 250 143**  
**Romania(+40) 021 318 36 06**  
**Slovakia (+421) 2 5477 4166**  
**Slovenia (+386) 41 635 500**  
**Spain(+34) 91 562 04 20**  
**Sweden(+46) Emergency 112 Others 08 331231**  
**Switzerland/Conf. Suisse/Schweizerische Eidgenossenschaft/Conf. Svizzera 145**  
**United Kingdom(+44) England and Wales NHS 111 (dial 111) Scotland Ns 24 (dial 111)**  
**USA - Poison Control Center - (800) 222-1222**

## 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: Specific target organ toxicity - repeated exposure, category 2	H373	May cause damage to organs through prolonged or repeated exposure.
Eye irritation, category 2	H319	Causes serious eye irritation.
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.

Hazard pictograms:



Signal words: Warning

Hazard statements:  
**H373** May cause damage to organs through prolonged or repeated exposure.  
**H319** Causes serious eye irritation.  
**H412** Harmful to aquatic life with long lasting effects.

Precautionary statements:  
**P260** Do not breathe dust / fume / gas / mist / vapours / spray.  
**P280** Wear eye protection / face protection.  
**P305+P351+P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Contains: DIATOMACEOUS EARTH, SODA ASH FLUX CALCINATED

### 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>DIATOMACEOUS EARTH, SODA ASH FLUX CALCINATED</b>		
CAS. 68855-54-9	60 - 70	STOT RE 2 H373
EC. 272-489-0		
INDEX.		
Reg. no. 01-2119488518-22-XXXX		
<b>CALCIUM SULPHATE DIHYDRATE</b>		
CAS. 10101-41-4	10 - 20	
EC. 231-900-3		
INDEX.		
Reg. no. 01-2119444918-26-XXXX		
<b>ZINC OXIDE</b>		
80,34% - metallic element		
CAS. 1314-13-2	1 - 2	Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410
EC. 215-222-5		
INDEX. 030-013-00-7		
Reg. no. 01-2119463881-32-XXXX		
<b>SODIUM PHOSPHATE TRIBASIC ANHYDROUS</b>		
CAS. 7601-54-9	1 - 2	Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335
EC. 231-509-8		
INDEX.		
Reg. no. 01-2119489800-32-XXXX		

**SECTION 3. Composition/information on ingredients. ... / >>****DIPOTASSIUM HEXAFLUOROTITANIUM(2-)**CAS. 16919-27-0 1 - 2 Acute Tox. 4 H302, Eye Dam. 1 H318  
EC. 240-969-9

## INDEX.

Reg. no. 01-2119978268-20-XXXX

**SODIUM PYROPHOSPHATE**CAS. 7722-88-5 1 - 2 Acute Tox. 4 H302, Eye Dam. 1 H318  
EC. 231-767-1

## INDEX.

Reg. no. 01-2119489794-17-XXXX

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

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

Do not breathe combustion products. The product is combustible and, when the powder is released into the air in sufficient concentrations and in the presence of a source of ignition, it can create explosive mixtures with air. Fires may start or get worse by leakage of the solid product from the container, when it reaches high temperatures or through contact with sources of ignition.

**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.**

If there are no contraindications, spray powder with water to prevent the formation of dust. Avoid breathing vapours/mists/gases.

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.**

Use spark-proof mechanical equipment to collect the leaked product and place it in containers for recovery or disposal. If there are no contraindications, use jets of water to eliminate product residues.

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.

**SECTION 6. Accidental release measures. ... / >>****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.**

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

**7.2. Conditions for safe storage, including any incompatibilities.**

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. 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:

CZE	Česká Republika	Nařízení vlády č. 361/2007 Sb. kterým se stanoví podmínky ochrany zdraví při práci
DEU	Deutschland	MAK-und BAT-Werte-Liste 2012
DNK	Danmark	Graensevaerdier per stoffer og materialer
ESP	España	INSHT - Límites de exposición profesional para agentes químicos en España 2015
EEST	Eesti	Töökeskkonna keemiliste ohutegurite piirnornid 1. Vastu võetud 18.09.2001 nr 293 RT I 2001, 77, 460 - Redaktsiooni jõustumise kp: 01.01.2008
FRA	France	JORF n°0109 du 10 mai 2012 page 8773 texte n° 102
GRB	United Kingdom	EH40/2005 Workplace exposure limits
GRC	Ελλάδα	ΕΦΗΜΕΡΙΣ ΤΗΣ ΚΥΒΕΡΝΗΣΕΩΣ -ΤΕΥΧΟΣ ΠΡΩΤΟ Αρ. Φύλλου 19 - 9 Φεβρουαρίου 2012
HRV	Hrvatska	NN13/09 - Ministarstvo gospodarstva, rada i poduzetništva
HUN	Magyarország	50/2011. (XII. 22.) NGM rendelet a munkahelyek kémiai biztonságáról
NLD	Nederland	Databank of the social and Economic Council of Netherlands (SER) Values, AF 2011:18
POL	Polska	ROZPORZĄDZENIE MINISTRA PRACY I POLITYKI SPOŁECZNEJ z dnia 16 grudnia 2011r
SVN	Slovenija	Uradni list Republike Slovenije 15. 6. 2007
SWE	Sverige	Occupational Exposure Limit Values, AF 2011:18
EU	OEL EU	Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC.
	TLV-ACGIH	ACGIH 2014

**DIATOMACEOUS EARTH, SODA ASH FLUX CALCINATED****Health - Derived no-effect level - DNEL / DMEL**

Route of exposure	Effects on consumers.				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral.			VND	3,5 mg/kg/d				
Inhalation.			VND	0,08 mg/m3			VND	0,33 mg/m3

**CALCIUM SULPHATE DIHYDRATE****Threshold Limit Value.**

Type	Country	TWA/8h		STEL/15min	
		mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm
VLA	ESP	10			
WEL	GRB	4			
MAC	NLD	10			
TLV-ACGIH		10			

**SECTION 8. Exposure controls/personal protection. ... / >>**
**ZINC OXIDE**
**Threshold Limit Value.**

Type	Country	TWA/8h		STEL/15min	
		mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm
TLV	CZE	1		2	
MAK	DEU	1		1	
TLV	DNK	4			
VLA	ESP	2		10	
TLV	EST	5			
VLEP	FRA	5			
TLV	GRC	5		10	
AK	HUN	5		20	
MAC	NLD	5			
NDS	POL	5		10	
MV	SVN		4		
MAK	SWE	5			
TLV-ACGIH		2		10	

**DIPOTASSIUM HEXAFLUOROTITANIUM(2-)**
**Threshold Limit Value.**

Type	Country	TWA/8h		STEL/15min	
		mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm
OEL	EU	2,5			

**SODIUM PYROPHOSPHATE**
**Threshold Limit Value.**

Type	Country	TWA/8h		STEL/15min	
		mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm
TLV	DNK	5			
VLEP	FRA	5			
WEL	GRB	5			
GVI	HRV	5			

**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 otherwise classified (PNOC respirable fraction: 3 mg/m<sup>3</sup>; PNOC inhalable fraction: 10 mg/m<sup>3</sup>). 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. Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

Exposure levels must be kept as low as possible to avoid significant build-up in the organism. Manage personal protective equipment so as to guarantee maximum protection (e.g. reduction in replacement times).

**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).

**RESPIRATORY PROTECTION**

Use a type P filtering facemask (see standard EN 149) or equivalent device, whose class (1, 2 or 3) and effective need, must be defined according to the outcome of risk assessment.

**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	powder
Colour	white
Odour	characteristic
Odour threshold.	Not available.
pH.	Not available.
Melting point / freezing point.	Not available.
Initial boiling point.	Not applicable.
Boiling range.	Not available.
Flash point.	Not applicable.
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.	2,300 Kg/l
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.**

VOC (Directive 2010/75/EC) :	0
VOC (volatile carbon) :	0

**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.

**10.4. Conditions to avoid.**

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

**10.5. Incompatible materials.**

Information not available.

**10.6. Hazardous decomposition products.**

Information not available.

**SECTION 11. Toxicological information.****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.

This product may cause functional disorders or morphological mutations after repeated or prolonged exposure and/or may accumulate inside the human body and is thus graded as dangerous.

Acute effects: stinging eyes. Symptoms may include: rubescence, edema, pain and lachrymation. Ingestion may cause health problems, including stomach pain and sting, nausea and sickness.

SODIUM PHOSPHATE TRIBASIC ANHYDROUS	
LD50 (Oral).	4,8 mg/kg Rat
LD50 (Dermal).	2 mg/kg Rabbit
LC50 (Inhalation).	2,16 mg/l/1h Rat

SODIUM PYROPHOSPHATE	
LD50 (Oral).	> 2000 mg/kg Rat

**SECTION 11. Toxicological information. ... / >>**

DIPOTASSIUM HEXAFLUOROTITANIUM(2-)  
LD50 (Oral). 324 mg/kg rat

DIATOMACEOUS EARTH, SODA ASH FLUX CALCINATED  
LD50 (Oral). > 2000 mg/kg rat  
LC50 (Inhalation). > 2,6 mg/l/4h 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.

**12.1. Toxicity.**

ZINC OXIDE  
LC50 - for Fish. 1,1 mg/l/96h Oncorhynchus mykiss  
EC50 - for Crustacea. 1,7 mg/l/48h Daphnia magna  
EC50 - for Algae / Aquatic Plants. 0,14 mg/l/72h Pseudokirchnerella subcapitata  
Chronic NOEC for Fish. 0,53 mg/l  
Chronic NOEC for Algae / Aquatic Plants. 0,024 mg/l

**12.2. Persistence and degradability.**

SODIUM PHOSPHATE TRIBASIC ANHYDROUS  
Solubility in water. > 10000 mg/l  
Biodegradability: Information not available.

SODIUM PYROPHOSPHATE  
Solubility in water. 58500 mg/l  
Biodegradability: Information not available.

ZINC OXIDE  
Solubility in water. 2,9 mg/l  
Solubility in water. mg/l 0,1 - 100  
Biodegradability: Information not available.  
NOT rapidly biodegradable.

**12.3. Bioaccumulative potential.**

ZINC OXIDE  
BCF. > 175

**12.4. Mobility in soil.**

SODIUM PYROPHOSPHATE  
Partition coefficient: soil/water. 2,17

**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.

**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.**

Not applicable.

**SECTION 14. Transport information. ... / >>****14.2. UN proper shipping name.**

Not applicable.

**14.3. Transport hazard class(es).**

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.**Seveso category. None.Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006.

None.

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 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:

<b>Acute Tox. 4</b>	Acute toxicity, category 4
<b>STOT RE 2</b>	Specific target organ toxicity - repeated exposure, category 2
<b>Eye Dam. 1</b>	Serious eye damage, category 1
<b>Eye Irrit. 2</b>	Eye irritation, category 2
<b>Skin Irrit. 2</b>	Skin irritation, category 2
<b>STOT SE 3</b>	Specific target organ toxicity - single exposure, category 3
<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 3</b>	Hazardous to the aquatic environment, chronic toxicity, category 3
<b>H302</b>	Harmful if swallowed.
<b>H373</b>	May cause damage to organs through prolonged or repeated exposure.
<b>H318</b>	Causes serious eye damage.
<b>H319</b>	Causes serious eye irritation.
<b>H315</b>	Causes skin irritation.
<b>H335</b>	May cause respiratory irritation.
<b>H400</b>	Very toxic to aquatic life.
<b>H410</b>	Very toxic to aquatic life with long lasting effects.
<b>H412</b>	Harmful to aquatic life with long lasting effects.



**SECTION 16. Other information. ... / >>**

Use descriptor system:

<b>ERC</b>	<b>2</b>	Formulation of preparations
<b>ERC</b>	<b>3</b>	Formulation in materials
<b>PC</b>	<b>32</b>	Polymer preparations and compounds
<b>PROC</b>	<b>1</b>	Use in closed process, no likelihood of exposure
<b>PROC</b>	<b>3</b>	Use in closed batch process (synthesis or formulation)
<b>PROC</b>	<b>5</b>	Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)
<b>SU</b>	<b>10</b>	Formulation [mixing] of preparations and/or re-packaging (excluding alloys)

## 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.

## Changes to previous review:

The following sections were modified:



**SECTION 16. Other information. ... / >>**

01 / 02.