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Safety data sheet

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

1.1. Product identifier

Code: **002030**

Product name KROMALTROPIC

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

Intended use For professional use only. Alginate for dental impression.

1.3. Details of the supplier of the safety data sheet

Name VANNINI DENTAL INDUSTRY SRL

Full address Via di Campigliano 55/A – 50012 Grassina Bagno a Ripoli – FI– Italy

District and Country Tel. +39 055 644698 Fax: +39 055 644697

www.vanninidental.com

Tel. +39 055 644698 Fax: +39 055 644697

e-mail address of the competent person E-mail: info@vanninidental.com

1.4. Emergency telephone number

For urgent inquiries refer to 0039 055 644698

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.

Hazardous to the aquatic environment, chronic toxicity, H412 Harmful to aquatic life with long lasting effects.

category 3

2.2. Label elements.

The Regulation EC 1272/2008, on classification, labelling and packaging of substances and mixtures (CLP), shall not apply to a medical device in the finished state used in direct physical contact with the human body according to art. 1.5, letter d). Therefore the product is exempted from the CLP labeling requirements.

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

Hazard pictograms:

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

Hazard pictograms:



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Signal words: Warning

Hazard statements:

H373 May cause damage to lungs through prolonged or repeated exposure. Route of exposure: inhalation.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P260 Do not breathe dust / fume / gas / mist / vapours / spray.

P273 Avoid release to the environment.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue

rinsing.

P314 Get medical advice / attention if you feel unwell.

Contains: CRISTOBALITE

2.3. Other hazards.

Classification of the mixture is based on the results of an in vitro assay conducted in accordance with the guidelines provided by OCSE (OECD Test Guideline 437 resp. EU Method B.47 – Bovine Corneal Opacity and Permeability (BCOP) Test Method) and GLP certified - Good Laboratory Practices. For more information refer to section 11.

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 67/548/EEC.	Classification 1272/2008 (CLP).
CRISTOBALITE			CRISTOBALITE

CAS. 14464-46-1 1 ≤ x < 8 STOT RE 1 H372 CAS. 14464-46-1 EC. 238-455-4 EC. 238-455-4

DIPOTASSIUM HEXAFLUOTOTITANATE DIPOTASSIUM

HEXAFLUOTOTITANATE

CAS. 16919-27-0 1 ≤ x < 3 Acute Tox. 4 H302, Eye Dam. CAS. 16919-27-0

EC. 240-969-9 INDEX. - INDEX. -

Reg. no. 01-2119978268-20-XXXX Reg. no. 01-2119978268-20-XXXX

1 H318

ZINC OXIDE ZINC OXIDE



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CAS. 1314-13-2

 $0.5 \le x < 2.5$

Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1

EC. 215-222-5

INDEX. 030-013-00-7

Reg. no. 01-2119463881-32-XXXX

VASELINE OIL

CAS. 8042-47-5 1 ≤ x < 3

Asp. Tox. 1 H304

EC. 232-455-8

INDEX. -

Reg. no. 01-2119487078-27-XXXX

ACETIC ACID

CAS. 64-19-7 0 ≤ x < 0,2 Flam. Liq. 3 H226, Skin Corr. 1A H314, Note B

EC. 200-580-7

INDEX. 607-002-00-6

Reg. no. 01-2119475328-30-XXXX

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 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.

INHALATION: 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.

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.



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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 iets 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.

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).

sEE SECTION 1.2

SECTION 8. Exposure controls/personal protection.

8.1. Control parameters.

Regulatory References:



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AUS	Österreich	Grenzwerteverordnung 2011 - GKV 2011
BEL	Belgique	AR du 11/3/2002. La liste est mise à jour pour 2010
CZE	Česká Republika	Nařízení vlády č. 361/2007 Sb. kterým se stanoví podmínky ochrany
OZL	oodka republika	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
LOI	Борана	España 2015
EST	Eesti	Töökeskkonna keemiliste ohutegurite piirnormid 1. Vastu võetud
		18.09.2001 nr 293 RT I 2001, 77, 460 - Redaktsiooni jõustumise kp:
		01.01.2008
FIN	Suomi	HTP-arvot 2012. Haitallisiksi tunnetut pitoisuudet - Sosiaali- ja
		terveysministeriön julkaisuja 2012:5
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
IRL	Éire	Code of Practice Chemical Agent Regulations 2011
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
NLD	Nederland	Databank of the social and Economic Concil of Netherlands (SER) Values,
		AF 2011:18
NOR	Norge	Veiledning om Administrative normer for forurensning i arbeidsatmosfære
POL	Polska	ROZPORZĄDZENIE MINISTRA PRACY I POLITYKI SPOŁECZNEJ z dnia
		16 grudnia 2011r
SVK	Slovensko	NARIADENIE VLÁDY Slovenskej republiky z 20. júna 2007
SVN	Slovenija	Uradni list Republike Slovenije 15. 6. 2007
SWE	Sverige	Occupational Exposure Limit Values, AF 2011:18
	TI 1 (1 0 0 II I	4.0.011.0.040

CRISTOBALITE

Threshold Limit Value.

Time	Country	T\\/ \/ \/ Ob		CTEL /4 Emails		
Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
VLEP	BEL	0,05				RESP.
TLV	DNK	0,15				RESP.
VLEP	FRA	0,05				RESP.
AK	HUN	0,15				RESP.
OEL	IRL	0,1				RESP.
VLEP	ITA	0,05				(USA-NIOSH)
MAC	NLD	0,075				RESP.

ACGIH 2016

DIPOTASSIUM HEXAFLUOTOTITANATE

TLV-ĂCGIH

Predicted no-effect concentration - PNEC.

Normal value in fresh water	0,131	mg/l
Normal value in marine water	0,131	mg/l
Normal value for fresh water sediment	24,45	mg/kg/d
Normal value for marine water sediment	4,89	mg/kg/d
Normal value of STP microorganisms	1,51	mg/l
Normal value for the terrestrial compartment	19,1	mg/kg
Health Desired as affect level DNEL / DMEL		

Health - Derived no-effect level - DNEL / DMEL

nealth - Derived no-effect le	vei - DNEL / Di	VIEL						
	Effects on				Effects on			
	consumers.				workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic	Acute local	Acute	Chronic local	Chronic
				systemic		systemic		systemic
Inhalation.					VND	5,2 mg/m3	5,2 mg/m3	5,2 mg/m3
						_	=	=
Skin.					VND	75 mg/kg	VND	75 mg/kg
						hw/d		bw/d



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ZINC OXIDE Threshold Limit Value.								
Type	Country	TWA/8h		STEL/15mir	า			
		mg/m3	ppm	mg/m3	ppm			
MAK	AUS	5						
VLEP	BEL	10						
TLV	CZE	1		2				
MAK	DEU	1		1				
TLV	DNK	4						
VLA	ESP	2		10				
TLV	EST	5						
НТР	FIN	2		10				
VLEP	FRA	5						
TLV	GRC	5		10				
AK	HUN	5		20				
OEL	IRL	2				RESP.		
MAC	NLD	5						
TLV	NOR	5						
NDS	POL	5		10				
NPHV	SVK	1						
MV	SVN		4					
MAK	SWE	5						
TLV-ACGIH		2		10				
VASELIN OIL								
Threshold Limit Value. Type	Country	TWA/8h		STEL/15min				
Туре	Country	mg/m3	nnm	mg/m3	nnm			
TLV-ACGIH		5	ppm	mg/ms	ppm	INHAL.		
TEV AGGIT		3				II WI II VE.		
	Effects on				Effects on			
Route of exposure	consumers. Acute local	Acute systemic	Chronic local	Chronic	workers Acute local	Acute	Chronic local	Chronic
Oral.			VND	systemic 40 mg/kg/d		systemic		systemic
Inhalation.			VND	35 mg/m3			VND	160 mg/m3
Skin.			VND	92 mg/kg/d			VND	220 mg/kg/d
				0 0				0 0
ACETIC ACID Threshold Limit Value.								
Туре	Country	TWA/8h		STEL/15min				
		mg/m3	ppm	mg/m3	ppm			
MAK	AUS	25	10	50	20			
VLEP	BEL	25	10	38	15			
TLV	CZE	25		35				
AGW	DEU	25	10	50	20			



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MAK	DEU	25	10	50	20	
TLV	DNK	25	10			
VLA	ESP	25	10	37	15	
TLV	EST	25	10	25	10	
НТР	FIN	13	5	25	10	
VLEP	FRA			25	10	
TLV	GRC	25	10	37	15	
GVI	HRV	25	10			
AK	HUN	25		25		
OEL	IRL	25	10	37	15	
RD	LTU	25	10			
RV	LVA	25	10			
MAC	NLD		10			
TLV	NOR	25	10			
NDS	POL	15		30		
VLE	PRT	25	10			
NPHV	SVK	25	10			
MV	SVN	25	10			
MAK	SWE	13	5	25	10	
OEL	EU	25	10			
TLV-ACGIH		25	10	37	15	
Predicted no-effect concentra	ation - PNEC.					
Normal value in fresh water Normal value in marine water Normal value for fresh water Normal value for mater, interr Normal value for water, interr Normal value of STP microor Normal value for the terrestria	sediment er sediment mittent release ganisms			3,058 0,3058 11,36 1,136 3,058 85 0,478		mg/l mg/kg mg/kg mg/l mg/l mg/kg
l						

Health - Derived no-effect level - DNEL / DMEL

ı		Effects on				Effects on			
ı		consumers.				workers			
l	Route of exposure	Acute local	Acute systemic	Chronic local	Chronic	Acute local	Acute	Chronic local	Chronic
l					systemic		systemic		systemic
l	Inhalation.	VND	25 mg/m3	VND	25 mg/m3	VND	25 mg/m3	VND	25 mg/m3

(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.

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.



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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.

SECTION 9. Physical and chemical properties.

9.1. Information on basic physical and chemical properties.

Appearance powder yellow Colour Odour mango Odour threshold. Not available. Not available. Melting point / freezing point. Not available. Initial boiling point. Not applicable. Boiling range. Not available. Flash point. Not applicable.

Evaporation Rate NA

Flammability of solids and gases
Lower inflammability limit.
Upper inflammability limit.
Lower explosive limit.
Upper explosive limit.
Upper explosive limit.
Vapour pressure.
Vapour density
NA
Not available.
Not available.
Not available.
Not available.

Relative density. Not available.

Solubility partially soluble in water

Partition coefficient: n-octanol/water
Auto-ignition temperature.

Decomposition temperature.

Viscosity

Explosive properties

Oxidising properties

Not available.

Not available.

Not available.

Not available.

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.

10.2. Chemical stability.



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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.

10.4. Conditions to avoid.

Avoid environmental dust build-up.

10.5. Incompatible materials.

Not known.

10.6. Hazardous decomposition products.

Not known.

SECTION 11. Toxicological information.

11.1. Information on toxicological effects.

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:12960,000 mg/kg

LD50 (Dermal) of the mixture: Not classified (no significant component).

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. (INTERNAL TEST (Bridging Principle) - Negative (OECD 437 resp. EU Method B.47, GLP, in vitro, study report 2014)).

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.

Does not meet the classification criteria for this hazard class.

STOT - REPEATED EXPOSURE.

May cause damage to organs.

ASPIRATION HAZARD.

Does not meet the classification criteria for this hazard class.

ZINC OXIDE

LD50 (Orale). > 5000 mg/kg (OECD 401, rat, ECHA dossier).

LD50 (Cutanea). > 2000 mg/kg (OECD 402, GLP, rat, ECHA dossier).

LC50 (Inalazione). > 5,7 mg/l (OECD 403, rat, ECHA dossier).

Skin irritation: Not irritating (publication, in vivo, guinea pig, ECHA dossier).

Eye irritation: Not irritating (OECD 405, GLP, in vivo, rabbit, ECHA dossier).

Skin Sensitization: Insufficient data (OECD 406, GLP, Guinea pig maximisation test, ECHA dossier). STOT - Repeated/single exposure: Negative (subchronic, inhalation exposure, rat, ECHA dossier).

Genotoxicity: Negative (in vivo, in vitro, ECHA dossier).

Carcinogenicity: No data available.

Toxicity to reproduction: No data available.



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VASELIN OIL

LD50 (Oral).> 5000 mg/kg (similar or equivalent to OECD 401, rat, dossier ECHA)

LD50 (Dermal). > 2000 mg/kgbw (similar or equvalent to OECD 402, rabbit, dossier ECHA)

LC50 (Inhalation).> 5 mg/L (OECD 403, rat, 4h, dossier ECHA)

Irritation/Corrosion

Skin irritation: No data available. Eye irritation: No data available. Skin Sensitization: No data available.

STOT - Repeated/single exposure: No data available.

CMR effects: No data available.

Aspiration toxicity: toxic for aspiration (MSDS supplier).

CRISTOBALITE

LD50 (Oral).> 2000 mg/kg (OECD 401, rat, MSDS supplier) LC50 (Inhalation).> 2,6 mg/l (OECD 403, rat, MSDS supplier)

Irritation/Corrosion

Skin irritation: Not irritating (MSDS supplier). Eye irritation: Not irritating (MSDS supplier). Sensitization: Not sensitizing (MSDS supplier).

Mutagenicity: No data available. Carcinogenicity: No data available. Toxicity to reproduction: No data available.

STOT Repeated Exposure:

In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However it pointed out that not all industrial circumstances, nor all crystalline silica types, were to be incriminated (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France).

In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003).

There is a body of evidence supporting the fact that increased cancer risk would not be limited to people already suffering from silicosis. According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

DIPOTASSIUM HEXAFLUOROTITANATE

Acute Toxicity

Inhalation: No data available. Dermal: No data available.

Irritation/Corrosion

Skin irritation: Not irritating (OECD 404, in vivo, rabbit, MSDS supplier). Eye irritation: Corrosive (OECD 405, in vivo, rabbit, MSDS supplier).

Skin sensitization: Not sensitising (OECD 406, GLP, Guinea pig maximisation test, MSDS supplier).

STOT Repeated/single exposure: No data available.

Genotoxicity in vitro: Negative (OECD 471, Test di Ames); Positive (OECD 487,476; chromosomic aberration) (MSDS supplier).

Genotoxicity in vivo: Positive (OECD 474, rat, SDS supplier).

Carcinogenicity: No data available.

Toxicity to reproduction: No data available.

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.**

ACETIC ACID

LC50 - for Fish. > 300,82 mg/l/96h (similar to OECD Guideline 203, Oncorhynchus mykiss, freshwayer, ECHA

dossier).

EC50 - for Crustacea. > 300,82 mg/l/48h (OECD Guideline 202, Daphnia magna, freshwater, ECHA dossier).

ZINC OXIDE

EC50 - for Crustacea. 0,83 mg/l/48h (pH< 7; Ceriodaphnia dubia, SDS supplier).

EC50 - for Algae / Aquatic 0,27 mg/l/72h (pH> 7; Pseudokirchnerella subcapitata, SDS supplier).

Plants.



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DIPOTASSIUM

HEXAFLUOTOTITANATE

LC50 - for Fish. 172,4 mg/l/96h (OECD 203, Brachydanio rerio, SDS supplier). EC50 - for Crustacea. 48,2 mg/l/48h (OECD 203, Daphnia magna, SDS supplier).

EC50 - for Algae / Aquatic 0,646 mg/l/72h (OECD 202, Pseudokirchneriella subcapitata, SDS supplier).

Plants.

12.2. Persistence and degradability.

ACETIC ACID

Solubility in water. > 10000 mg/l

ZINC OXIDE

Biodegradability: Information not available.

NOT rapidly biodegradable.

CRISTOBALITE

NOT rapidly biodegradable.

DIPOTASSIUM HEXAFLUOTOTITANATE NOT rapidly biodegradable.

12.3. Bioaccumulative potential.

ACETIC ACID

Partition coefficient: n- -0,17

octanol/water.

12.4. Mobility in soil.

ACETIC ACID

Partition coefficient: 1,153

soil/water.

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.



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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.

Avoid littering. Do not contaminate soil, sewers and waterways.

CONTAMINATED PACKAGING

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

SECTION 14. Transport information.

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

14.1. UN number.

Not applicable.

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 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:

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

Substances in Candidate List (Art. 59 REACH).

None.

Substances subject to authorisarion (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.



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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:

Flam. Liq. 3 Flammable liquid, category 3
Acute Tox. 4 Acute toxicity, category 4

STOT RE 1 Specific target organ toxicity - repeated exposure, category 1

Skin Corr. 1A Skin corrosion, category 1A Asp. Tox. 1 Aspiration hazard, category 1

STOT RE 2 Specific target organ toxicity - repeated exposure, category 2

Eye Dam. 1 Serious eye damage, category 1

Eye Irrit. 2 Eye irritation, category 2

Aquatic Acute 1
Aquatic Chronic 1
Aquatic Chronic 2
Aquatic Chronic 3
Aquatic Chronic 3
Aquatic Chronic 4
Hazardous to the aquatic environment, chronic toxicity, category 1
Hazardous to the aquatic environment, chronic toxicity, category 2
Hazardous to the aquatic environment, chronic toxicity, category 3
Hazardous to the aquatic environment, chronic toxicity, category 4

H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H372 Causes damage to organs through prolonged or repeated exposure.

H314 Causes severe skin burns and eye damage.H304 May be fatal if swallowed and enters airways.

H373 May cause damage to organs through prolonged or repeated exposure.

H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.
 H411 Toxic to aquatic life with long lasting effects.
 H412 Harmful to aquatic life with long lasting effects.
 H413 May cause long lasting harmful effects to aquatic life.

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%



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- **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:

A safety data sheet is not required for this product under article 31 of Regulation 1907/2006/EC.

This safety data sheet has been created on a voluntary basis.

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.