Safety Data Sheet
LIFE CATALYST

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

1.1. Product identifier

Product name : LIFE CATALYST

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

Relevant identified uses

Main use category : Professional use

Function or use category : Dental materials.

Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier
Kerr Italia S.r.l.
Via Passanti, 332
84018 Scafati (SA) - Italy
T +39-081-850-8311
E-mail: safety@kerrhawe.com

Manufacturer
Kerr Italia S.r.l.
Via Passanti, 332
84018 Scafati (SA) - Italy
T +39-081-850-8311
E-mail: safety@kerrhawe.com

Contact person : safety@kerrhawe.com - tel. 00-800-41-050-505 (08.00-17.00)

1.4. Emergency telephone number

Emergency number : CHEMTREC® Emergency Call Center. Emergency Telephone Number (for USA only) 001-800-424-9300 International and Maritime Telephone Number +1 (703) 527-3887

Country	Organisation/Company	Address	Emergency number
United Kingdom	National Poisons Information Service (Newcastle Unit)	Claremont Place Newcastle-upon-Tyne, Newcastle	+44 191 2606182/+44 191 2606180 24H

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute Tox. 4 (Oral) H302

Eye Dam. 1 H318

Full text of hazard classes and H-statements : see section 16

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :

GHS05 GHS07

Signal word (CLP) : Danger

Hazardous ingredients : Methyl salicylate, 2,2-dimethylpropane-1,3-diol

Hazard statements (CLP) : H302 - Harmful if swallowed
H318 - Causes serious eye damage

Precautionary statements (CLP) : P264 - Wash hands, forearms and face thoroughly after handling
P270 - Do not eat, drink or smoke when using this product.
P280 - Wear eye protection, protective gloves
P301+P312 - IF SWALLOWED: Call a doctor, a POISON CENTER if you feel unwell

P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor
P330 - Rinse mouth
P501 - Dispose of contents/container to ...

Extra phrases : The product is seen as a medical device and therefore not subject to labelling (EU-regulation 1907/2006, article 2, paragraph 6c).

2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Methyl salicylate	(CAS No) 119-36-8 (EC no) 204-317-7 (REACH-no) 01-2119515671-44	=>35-<50	Acute Tox. 4 (Oral), H302
barium sulphate	(CAS No) 7727-43-7 (EC no) 231-784-4 (REACH-no) 01-2119491274-35	=>35-<50	Not classified
titanium dioxide	(CAS No) 13463-67-7 (EC no) 236-675-5 (REACH-no) 01-2119489379-17	=>10-<15	Not classified
2,2-dimethylpropane-1,3-diol	(CAS No) 126-30-7 (EC no) 204-781-0 (REACH-no) 01-2119480396-30	=>5-<10	Eye Dam. 1, H318

Full text of H-statements: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

First-aid measures general : Move to fresh air. If medical advice is needed, have product container or label at hand.

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact : Gently wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

First-aid measures after ingestion : If swallowed, rinse mouth with water (only if the person is conscious). Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

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

Symptoms/injuries after skin contact : Redness, pain. Blisters.

Symptoms/injuries after eye contact : Causes serious eye damage. Redness, pain.

Symptoms/injuries after ingestion : Harmful if swallowed. May cause a light irritation of the linings of the mouth, throat, and gastrointestinal tract.

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

No specific measures identified.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire. Foam, carbon dioxide (CO_2) and powder.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Non flammable.

Explosion hazard : Product is not explosive.

Hazardous decomposition products in case of fire : Carbon dioxide. Carbon monoxide. Sulphur oxides. metallic oxide.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Wear appropriate personal protective equipment - see Section 8. Avoid all eye and skin contact and do not breathe vapour and mist. Do not eat, drink or smoke in areas where product is used.

For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

For emergency responders

No additional information available

6.2. Environmental precautions

Discharging into rivers and drains is forbidden.

6.3. Methods and material for containment and cleaning up

For containment : Collect all waste in suitable and labelled containers and dispose according to local legislation.

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Remove contaminated clothes.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in dry protected location to prevent any moisture contact. Keep container tightly closed. Store in original container. Keep away from food, drink and animal feeding stuffs. Store in a well-ventilated place. Keep cool.

Incompatible materials : Oxidizing substances.

7.3. Specific end use(s)

Consult the supplier for further information.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

barium sulphate (7727-43-7)		
United Kingdom	Local name	Barium sulphate
United Kingdom	WEL TWA (mg/m³)	10 mg/m³ inhalable dust 4 mg/m³ respirable dust

titanium dioxide (13463-67-7)		
United Kingdom	Local name	Titanium dioxide
United Kingdom	WEL TWA (mg/m³)	4 mg/m³ respirable 10 mg/m³ total inhalable

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

Personal protective equipment : Gloves. Safety glasses.

Hand protection	:	Wear suitable gloves. Neoprene or nitrile rubber gloves. Layer thickness : 0,1 mm. Breakthrough time : > 60 minutes. STANDARD EN 374.
Eye protection	:	Use splash goggles when eye contact due to splashing is possible. STANDARD EN 166.
Skin and body protection	:	Wear suitable protective clothing
Respiratory protection	:	No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation

Other information	:	Do not eat, drink or smoke during use. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Paste.
Colour	:	Beige. Off-white. light pink.
Odour	:	characteristic.
Odour threshold	:	No data available
pH	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	No data available
Vapour pressure	:	No data available
Relative vapour density at 20 °C	:	No data available
Relative density	:	2
Solubility	:	Material insoluble in water.
Log Pow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	Product is not explosive.
Oxidising properties	:	Non flammable.
Explosive limits	:	No data available

9.2. Other information

Additional information	:	None to our knowledge

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No polymerization.

10.4. Conditions to avoid

Keep away from heat and direct sunlight.

10.5. Incompatible materials

Oxidizing agent.

10.6. Hazardous decomposition products

No decomposition if stored normally.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed.
May cause a light irritation of the linings of the mouth, throat, and gastrointestinal tract

ATE CLP (oral)	1774.000 mg/kg bodyweight

Methyl salicylate (119-36-8)	
LD50 oral rat	887 mg/kg bodyweight
LD50 dermal rat	> 2500 mg/kg bodyweight
LD50 dermal rabbit	> 5000 mg/kg bw/day

barium sulphate (7727-43-7)	
LD50 oral rat	> 20000 mg/kg

titanium dioxide (13463-67-7)	
LD50 oral rat	> 100000 mg/kg

2,2-dimethylpropane-1,3-diol (126-30-7)	
LD50 oral rat	> 3200 mg/kg bodyweight

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Causes serious eye damage.

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

Methyl salicylate (119-36-8)	
LC50 fish 1	10 - 100 mg/l 96h
EC50 Daphnia 1	10 - 100 mg/l 48h
IC50 algae	0.885 mg/l 72h

barium sulphate (7727-43-7)	
LC50 fish 1	> 7600 mg/l (96 hours)
EC50 Daphnia 1	> 32 mg/l (48 hours - Daphnia magna)

titanium dioxide (13463-67-7)	
LC50 fish 1	> 1000 mg/l (96 hours - Fundulus heteroclitus)
EC50 Daphnia 1	> 1000 mg/l (48 hours - Daphnia magna)

2,2-dimethylpropane-1,3-diol (126-30-7)	
LC50 fish 1	> 1000 mg/l (96 hours - Oryzias latipes)
EC50 Daphnia 1	> 500 mg/l (48 hours - Daphnia magna)
IC50 algae	> 500 mg/l 72 hours - Scenedesmus subspicatus

12.2. Persistence and degradability

LIFE CATALYST	
Persistence and degradability	No data available.

2,2-dimethylpropane-1,3-diol (126-30-7)	
Biodegradation	5 % 35 days (OECD 301E method)

12.3. Bioaccumulative potential

LIFE CATALYST	
Bioaccumulative potential	Low bioaccumulation potential.

Methyl salicylate (119-36-8)	
Bioconcentration factor (BCF REACH)	46
Log Pow	1.59

2,2-dimethylpropane-1,3-diol (126-30-7)	
Bioconcentration factor (BCF REACH)	< 9
Log Pow	-0.15

12.4. Mobility in soil

LIFE CATALYST	
Ecology - soil	Material insoluble in water.

12.5. Results of PBT and vPvB assessment

LIFE CATALYST
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

Other adverse effects : None to our knowledge.

Additional information : No other effects known

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Regional legislation (waste) : Dispose as hazardous waste.

Waste treatment methods : Recover the product with absorbent material. Dispose of contents/container in accordance with licensed collector's sorting instructions.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

European List of Waste (LoW) code : 18 01 06* - chemicals consisting of or containing dangerous substances

SECTION 14: TRANSPORT INFORMATION

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

14.5. Environmental hazards

Dangerous for the environment : No

Other information : No supplementary information available

14.6. Special precautions for user

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: REGULATORY INFORMATION

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

EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

National regulations

EC-regulation 453/2010/EC, 1907/2006/EC (REACH), 1272/2008/EC (CLP), 790/2009/EC. Transport of dangerous goods (ADR/RID, IMDG, IATA/ICAO). Workplace exposure limits.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for the substance or the mixture by the supplier

SECTION 16: OTHER INFORMATION

Indication of changes:
Regulatory information.

2.1	Classification according to Directive 67/548/EEC [DSD] or	Removed	

	1999/45/EC [DPD]		
2.1	Hazard statements (CLP)	Added	Acute Tox. 4 (Oral)
2.1	Hazard statements (CLP)	Added	Eye Dam. 1
2.2	Hazard statements (CLP)	Added	H302
2.2	Hazard statements (CLP)	Added	Harmful if swallowed
2.2	Hazard symbols	Added	GHS07
2.2	Hazard statements (CLP)	Added	H318
2.2	Hazard statements (CLP)	Added	Causes serious eye damage
2.2	Hazard symbols	Added	GHS05
2.2	Signal word (CLP)	Added	Danger
3.2	Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]	Removed	
3.2	Composition/information on ingredients	Modified	

Date of issue : 15/04/2013
Revision date : 15/10/2015
Supersedes : 20/05/2014
Version : 3.0
Signature : A. Åsebø Murel

Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
H302	Harmful if swallowed
H318	Causes serious eye damage

The information in this safety data sheet is based on information from the manufacturer/supplier, present European and national legislation, and presupposes that the product is used within the specified area of application.

SAFETY DATA SHEET
Life Base

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

1.1. Product identifier

Product name Life Base

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

Applications Dental cavity liner and pulp capping agent.

1.3. Details of the supplier of the safety data sheet

Supplier
Kerr Italia S.r.l.
Via Passanti, 332
84018 Scafati (SA) - Italy
Tel: +39-081-850-8311
E-mail: safety@kerrhawe.com

Contact person E-mail: safety@kerrhawe.com (Mobile Phone number 08.00 – 23.00: +39-340.1721884)

Manufacturer
Kerr Italia S.r.l.
Via Passanti, 332
84018 Scafati (SA) - Italy
Tel: +39-081-850-8311
E-mail: safety@kerrhawe.com

1.4. Emergency telephone number

Emergency telephone number 112 # The UK National Poisons Emergency number: +44 870 600 6266 WEB: http://www.toxbase.org
CHEMTREC® Emergency Call Center. Emergency Telephone Number (for USA only) 001-800-424-9300
International and Maritime Telephone Number +1 (703) 527-3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to directives 67/548/EEC, 99/45/EC & 2001/58/EC (DSD/DPD) N, R-51/53

Classification according to directive 1272/2008 (CLP)
GHS09
Aquatic Chronic 2: H411

Hazard The product is seen as a medical device and therefore not subject to labelling, regulation (EC) no 1272/2008 of the european parliament and of the council, article 1d; Medical devices as defined in Directives 90/385/EEC and 93/42/EEC, which are invasive or used in direct physical contact with the human body, and in Directive 98/79/EC.

2.2. Label elements

CLP

Hazard pictograms

Hazard statements Aquatic Chronic 2: H411 Toxic to aquatic life with long lasting effects.

Precautionary statements P273 Avoid release to the environment.

Contains zinc oxide
calcium oxide
calcium hydroxide

2.3. Other hazards

Meets the criteria for vPvB No.

Meets the criteria for PBT No.

Other hazards which do not contribute to classification No known risks.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Ingredients

Name	EC No.	CAS No.	Content	Symbol	Classification
zinc oxide	215-222-5	1314-13-2	12-17 %	N	R-50/53
calcium oxide	215-138-9	1305-78-8		-	
calcium hydroxide	215-137-3	1305-62-0	3-6 %	Xi	R-36/38

CLP

Name	REACH No.	Content	Symbol	Classification	CAS No.
zinc oxide	01-2119463881-32	12-17 %	GHS09, , Warning	Aquatic Acute 1: H400, Aquatic Chronic 1: H410	1314-13-2
calcium oxide	01-2119475325-36				1305-78-8
calcium hydroxide	01-2119475151-45	3-6 %	GHS07, , Warning	Eye Irrit. 2: H319, Skin Irrit. 2: H315	1305-62-0

Section 16 contains detailed classification phrases.

SECTION 4: First aid measures

4.1. Description of first aid measures

General General first aid, rest, warmth and fresh air. Contact physician if discomfort continues.

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

Specific first aid treatment No specific first aid measures noted.

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

Inhalation Fresh air. Get medical attention if any discomfort continues.

Ingestion Rinse mouth thoroughly with water and give large amounts of milk or water to people not unconscious. Do not induce vomiting. Get medical attention if any discomfort continues.

Skin Wash skin with soap and water.

Eyes Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention if any discomfort continues.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Extinguishing media Powder, foam or CO2.

Special fire fighting procedures Containers close to fire should be removed or cooled with water.

5.2. Special hazards arising from the substance or mixture

Specific hazards Non-flammable.

Hazardous combustion products Fire or high temperatures create: Carbon monoxide (CO). Carbon dioxide (CO2). Irritating gases/vapours/fumes.

5.3. Advice for firefighters

Protective measures in fire Firefighters exposed to combustion gases/decomposition products should use a respiratory protective device.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal protection Wear appropriate personal protective equipment - see Section 8.

6.2. Environmental precautions

Environmental protection Runoff or release to sewer, waterway or ground is forbidden.

6.3. Methods and material for containment and cleaning up

Spill cleanup methods Collect for reclamation or absorb in vermiculite, dry sand or similar material.

6.4. Reference to other sections

See section 13 for waste handling.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store at ambient temperature in dry, well-ventilated area. Keep in original container. Keep containers tightly closed. Store separated from: Acids.

7.3. Specific end use(s)

Specific use(s) Contact supplier for more information.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Ingredient name	CAS no.	Reference	LT Exp 8 Hrs	ST Exp 15 Min	Date
calcium oxide	1305-78-8	WEL.		2 mg/m3	
calcium hydroxide	1305-62-0	WEL.	5 mg/m3		

Ingredient comments WEL = Workplace exposure limits. SK= Skin absorbance, Rep= Reproduction, Carc= Carcinogenic Senz= Sensitisers, Mut= Carcinogenic

Protective equipment

Ventilation	No particular ventilation requirements.

8.2. Exposure controls

Respirators	Under normal conditions of use respiration protection should not be required.
Protective gloves	Use protective gloves made of: Polyvinyl chloride (PVC). Time of breakthrough is not known, change gloves regulary. Suitable glove must be chosen in consultation with the gloves supplier, giving information of the breakthrough time for the glove material. Standard EN 374.
Eye protection	Wear approved safety goggles. Standard EN 166.
Other Protection	Wear appropriate clothing to prevent any possibility of skin contact.
Hygienic work practices	Wash at the end of each work shift and before eating, smoking and using the toilet.
DNEL	No data.
PNEC	No data.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Paste.
Colour	White.
Odour	Odourless or no characteristic odour.
Solubility description	Insoluble in water.

9.2. Other information

Safety information	Not known.

SECTION 10: Stability and reactivity

10.1. Reactivity

No reactive groups.

10.2. Chemical stability

Stable under the prescribed storage conditions. Avoid: Moisture.

10.3. Possibility of hazardous reactions

Hazardous polymerisation	Will not polymerise. Product do not have any stabilizers.

10.4. Conditions to avoid

Water, moisture.

10.5. Incompatible materials

Materials to avoid	Strong acids.

10.6. Hazardous decomposition products

Hazardous decomp. products	No hazardous decomposition products are emitted at recommended use and storage conditions.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Sensitization	No allergic reaction is known.
Genotoxicity	No known heritable or mutagenic effects.

Carcinogenicity	No evidence of carcinogenic properties.
Reproduction toxicity	No known hazardous effects on reproduction, fertility or to the unborn child.
Inhalation	No specific health warnings noted.
Ingestion	Uncured material may be harmful if swallowed.
Skin	Prolonged or repeated contact may cause irritation.
Eyes	Dust in the eyes will cause irritation.
COMPONENT:	**zinc oxide**
Toxic dose - LD50:	>5000 mg/kg (oral rat)
Toxic dose - LD50:	7950 mg/kg (oral mouse)
Toxic dose - LD50 (skin):	>2000 mg/kg (skin rabbit)
Toxic conc. - LC50:	0,57 mg/l/4h (inhalation rat)
COMPONENT:	**calcium hydroxide**
Toxic dose - LD50:	7300 mg/kg (oral rat)

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity	Toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

Unknown.

12.3. Bioaccumulative potential

Unknown.

12.4. Mobility in soil

Mobility	The product is insoluble in water.

12.5. Results of PBT and vPvB assessment

PTB/vPvB	Component(s) is not identified as a PBT or vPvB-substance.

12.6. Other adverse effects

No known information.

COMPONENT:	**zinc oxide**
LC 50, 96 Hrs, Fish mg/l:	1,1 (Onchorhyncus mykiss)
EC 50, 48 Hrs, Daphnia, mg/l:	24,6 (Daphnia magna)
IC 50, 72 Hrs, Algae, mg/l:	1,8 (Chlorella vulgaris)
Bioaccumulative potential	BCF:92
Partition coefficient (log Pow)	<0

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General/cleaning	Waste is classified as hazardous waste.
Disposal methods	Confirm disposal procedures with environmental engineer and local regulations.
Waste class	18 01 06* chemicals consisting of or containing dangerous substances
Contaminated packaging	The product packaging must be disposed of in compliance with the country specific regulations.

SECTION 14: Transport information

Label for conveyance

ROAD TRANSPORT (ADR):

14.1. UN number

UN no. road	3077
UN no. sea	3077
UN no., air	3077

14.2. UN proper shipping name

Proper shipping name (national)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide)
Proper shipping name (international)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide)

14.3. Transport hazard class(es)

ADR class no.	9
ADR Hazard labels	9
Classification code	M7
Hazard no. (ADR)	90

RAIL TRANSPORT (RID):

RID class no.	9
RID Hazard labels	9

SEA TRANSPORT (IMDG):

IMDG class	9
EmS no.	F-A,S-F
Marine pollutant	Yes.

TRANSPORT BY INLAND WATERWAYS (ADN):

AIR TRANSPORT (IATA-DGR / ICAO-TI):

IATA/ICAO class	9
IATA/ICAO Hazard label	Miscellaneous

14.4. Packing group

ADR packing group	III
RID packing group	III
IMDG packing group	III
IATA/ICAO packing group	III

14.5. Environmental hazards

Transport by inland waterways notes	Not applicable.

14.6. Special precautions for user

No particular precautions.

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

No IBC-code for bulk transport offshore (MARPOL).

SECTION 15: Regulatory information

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

EU directives	Medical, invasive equipment, EU-regulation 1272/2008, article 1, paragraph 5d, EU-regulation 453/2010/EC, 1907/2006/EC (REACH), 1272/2008/EC (CLP),

790/2009/EC. Tranport of dangerous goods (ADR/RID, IMDG, IATA/ICAO). Workplace exposure limits.

15.2. Chemical safety assessment

Chemical Safety Assessment	Chemical Safety Report (CSR) has not been carried out for this product.

SECTION 16: Other information

Explanations to R-phrases in section 3	R-36/38 Irritating to eyes and skin. R-50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Explanations to classification in section 3	H315 Causes skin irritation. H319 Causes serious eye irritation. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects.
DSD/DPD	
Labeling	N,
Risk phrases	R-51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

*** Information revised since the previous version of the SDS**

Revision comments	Revision 20.05.2014, no. 1: supersedes safety data sheet of 15.04.2013. Prepared in CLP-format. No change in composition or product classification.
Issued by	Essenticon AS, Leif Weldingsvei 18, N-3208 Sandefjord, Norway. E-mail: post@essenticon.no. Phone.: +47 33 42 34 50 - Fax: +47 33 42 34 59 www.essenticon.com
Date of issue	15.04.2013
Revision date	20.05.2014
Revision no.	1
Rev. no./repl. SDS generated	15.04.2013
Safety Data Sheet status	CLP 03 ATP
Signature	R. E. Lunde
Disclaimer	CAUTION: PRODUCT FOR PROFESSIONAL USE The information on this Safety Sheet is based on presently available data and to our best knowledge for the correct handling of the product under normal conditions. Any use of this product in any way not indicated on this Sheet or the use of this product together with any other process/procedure will be exclusively under the user’s responsibility. This document does not constitute explicit or implicit warranty of product quality or fitness for a particular purpose.