COLTENE

Lab-Putty Base

Coltène/Whaledent AG

Version No: 2.2

Safety Data Sheet according to the United Nations GHS (Rev. 10, 2023)

Issue Date: **21/01/2025** Print Date: **17/04/2025** L.REACH.GB.EN

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

1.1. Product Identifier

Product name	ab-Putty Base	
Chemical Name	Not Applicable	
Synonyms	Not Available	
Chemical formula	Not Applicable	
Other means of identification	UFI: 17X5-13E1-EN4V-K1AD	

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

Relevant identified uses	For dental use only Use according to manufacturer's directions.
Uses advised against	No specific uses advised against are identified.

1.3. Details of the manufacturer or supplier of the safety data sheet

Registered company name	Coltène/Whaledent AG	
Address	Feldwiesenstrasse 20 Altstätten 9450 Switzerland	
Telephone	71) 75 75 300	
Fax	+41 (71) 75 75 301	
Website	www.coltene.com	
Email	msds@coltene.com	

1.4. Emergency telephone number

Association / Organisation	CHEMWATCH EMERGENCY RESPONSE (24/7)	
Emergency telephone number(s)	+44 20 3901 3542 (ID#: 9-901769)	
Other emergency telephone number(s)	+44 808 164 9592	

SECTION 2 Hazards identification

2.1. Classification of the substance or mixture

Classified according to GB-CLP Regulation, UK SI 2019/720 and UK SI 2020/1567 ^[1]	H412 - Hazardous to the Aquatic Environment Long-Term Hazard Category 3
Legend:	1. Classified by Chemwatch; 2. Classification drawn from GB-CLP Regulation, UK SI 2019/720 and UK SI 2020/1567

2.2. Label elements

Hazard pictogram(s)	Not Applicable
Signal word	Not Applicable

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H412 Harmful to aquatic life with long lasting effects.

Supplementary statement(s)

Not Applicable

Precautionary statement(s) Prevention

P273 Avoid release to the environment.

Precautionary statement(s) Response

Not Applicable

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

P501

Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

Material contains silica crystalline - quartz.

2.3. Other hazards

Inhalation may produce health damage*.

Cumulative effects may result following exposure*.

May produce discomfort of the eyes and skin*.

Limited evidence of a carcinogenic effect*.

*LIMITED EVIDENCE

REACH - Art.57-59: The mixture does not contain Substances of Very High Concern (SVHC) at the SDS print date.

SECTION 3 Composition / information on ingredients

3.1.Substances

See 'Composition on ingredients' in Section 3.2

3.2.Mixtures

1. CAS No 2.EC No 3.Index No 4.REACH No	% [weight]	Name	Classified according to GB-CLP Regulation, UK SI 2019/720 and UK SI 2020/1567	SCL / M-Factor	Nanoform Particle Characteristics
1. 14808-60-7 2.238-878-4 3.Not Available 4.Not Available	15-25	<u>silica</u> crystalline - <u>quartz</u>	Specific Target Organ Toxicity - Repeated Exposure Category 2; H373 ^[1]	SCL: Not Available Acute M factor: Not Applicable Chronic M factor: Not Applicable	Not Available
1. 1314-13-2 2.215-222-5 3.030-013-00-7 4.Not Available	<1	zinc oxide	Hazardous to the Aquatic Environment Acute Hazard Category 1, Hazardous to the Aquatic Environment Long-Term Hazard Category 1; H400, H410 ^[2]	SCL: Not Available Acute M factor: 10 Chronic M factor: 1	Not Available
Legend			2. Classification drawn from GB-CLP Regulation, UK S AL; * EU IOELVs available; [e] Substance identified as h		

SECTION 4 First aid measures

4.1. Description of first aid measures

Eve Contact

If this product comes in contact with the eyes: Wash out immediately with fresh running water.

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	 Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	 If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Inhalation	 If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.
Ingestion	 Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11

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

Treat symptomatically.

SECTION 5 Firefighting measures

5.1. Extinguishing media

- There is no restriction on the type of extinguisher which may be used.
- Use extinguishing media suitable for surrounding area.

5.2. Special hazards arising from the substrate or mixture

Fire Incompatibility	None known.

5.3. Advice for firefighters

Fire Fighting	 Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water courses. Use fire fighting procedures suitable for surrounding area. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use.
Fire/Explosion Hazard	 Non combustible. Not considered a significant fire risk, however containers may burn. Decomposition may produce toxic fumes of: metal oxides May emit corrosive fumes.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

See section 8

6.2. Environmental precautions

See section 12

6.3. Methods and material for containment and cleaning up

Minor Spills	 Environmental hazard - contain spillage. Clean up all spills immediately. Avoid contact with skin and eyes. Wear impervious gloves and safety goggles. Trowel up/scrape up. Place spilled material in clean, dry, sealed container. Flush spill area with water.
Major Spills	 Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear full body protective clothing with breathing apparatus. Prevent, by all means available, spillage from entering drains or water courses. Consider evacuation (or protect in place). No smoking, naked lights or ignition sources. Increase ventilation. Stop leak if safe to do so.

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 Water spray or fog may be used to disperse / absorb vapour.
Contain or absorb spill with sand, earth or vermiculite.
 Collect solid residues and seal in labelled drums for disposal.
Wash area and prevent runoff into drains.
• After clean up operations, decontaminate and launder all protective clothing and equipment before storing and re-using.
If contamination of drains or waterways occurs, advise emergency services.
Environmental hazard - contain spillage.
Environmental hazard - contain spinage.

6.4. Reference to other sections

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Safe handling	 Limit all unnecessary personal contact. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling. Work clothes should be laundered separately. Use good occupational work practice. Observe manufacturer's storage and handling recommendations contained within this SDS. Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.
Fire and explosion protection	See section 5
Other information	 Store in original containers. Keep containers securely sealed. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this SDS.

7.2. Conditions for safe storage, including any incompatibilities

	-
Suitable container	 Recommended storage temperature: 15 - 23 °C Polyethylene or polypropylene container. Packing as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.
Storage incompatibility	None known
Hazard categories in accordance with Regulation (EC) No 2012/18/EU (Seveso III)	Not Available
Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of	Not Available

7.3. Specific end use(s)

See section 1.2

SECTION 8 Exposure controls / personal protection

8.1. Control parameters

Ingredient	DNELs Exposure Pattern Worker	PNECs Compartment
zinc oxide	Dermal 0.112 mg/kg bw/day (Systemic, Chronic) Inhalation 0.005 mg/m ³ (Systemic, Chronic) Inhalation 0.004 mg/m ³ (Local, Chronic) Inhalation 2 mg/m ³ (Systemic, Acute) Dermal 0.112 mg/kg bw/day (Systemic, Chronic) * Inhalation 0.001 mg/m ³ (Systemic, Chronic) * Oral 0.001 mg/kg bw/day (Systemic, Chronic) * Inhalation 1 mg/m ³ (Systemic, Acute) *	0.00019 mg/L (Water (Fresh)) 0.0012 mg/L (Water - Intermittent release) 0.00114 mg/L (Water (Marine)) 18 mg/kg sediment dw (Sediment (Fresh Water)) 6.4 mg/kg sediment dw (Sediment (Marine)) 0.7 mg/kg soil dw (Soil) 0.02 mg/L (STP) 0.16 mg/kg food (Oral)

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* Values for General Population

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
UK Workplace Exposure Limits (WELs).	silica crystalline - quartz	Silica, respirable crystalline (respirable fraction)	0.1 mg/m3	Not Available	Not Available	Carc (where generated as a result of a work process)
Ingredient	ngredient Original IDLH			Revised IDLH		
silica crystalline - quartz	25 mg/m3 / 50 mg/i	25 mg/m3 / 50 mg/m3			Not Available	
zinc oxide	500 mg/m3	500 mg/m3			Not Available	

MATERIAL DATA

WARNING: For inhalation exposure ONLY:

This substance has been classified by the ACGIH as A2 Suspected Human Carcinogen.

for zinc oxide:

Zinc oxide intoxication (intoxication zincale) is characterised by general depression, shivering, headache, thirst, colic and diarrhoea.

Exposure to the fume may produce metal fume fever characterised by chills, muscular pain, nausea and vomiting. Short-term studies with guinea pigs show pulmonary function changes and morphologic evidence of small airway inflammation. A no-observed-adverse-effect level (NOAEL) in guinea pigs was 2.7 mg/m3 zinc oxide. Based on present data, the current TLV-TWA may be inadequate to protect exposed workers although known physiological differences in the guinea pig make it more susceptible to functional impairment of the airways than humans.

WARNING: For inhalation exposure ONLY: This substance has been classified by the IARC as Group 1: CARCINOGENIC TO HUMANS

The International Agency for Research on Cancer (IARC) has classified occupational exposures to **respirable** (<5 um) crystalline silica as being carcinogenic to humans . This classification is based on what IARC considered sufficient evidence from epidemiological studies of humans for the carcinogenicity of inhaled silica in the forms of quartz and cristobalite. Crystalline silica is also known to cause silicosis, a non-cancerous lung disease. Intermittent exposure produces; focal fibrosis, (pneumoconiosis), cough, dyspnoea, liver tumours.

* Millions of particles per cubic foot (based on impinger samples counted by light field techniques).

NOTE : the physical nature of quartz in the product determines whether it is likely to present a chronic health problem. To be a hazard the material must enter the breathing zone as respirable particles.

The concentration of dust, for application of respirable dust limits, is to be determined from the fraction that penetrates a separator whose size collection efficiency is described by a cumulative log-normal function with a median aerodynamic diameter of 4.0 um (+-) 0.3 um and with a geometric standard deviation of 1.5 um (+-) 0.1 um, i.e..generally less than 5 um.

Because the margin of safety of the quartz TLV is not known with certainty and given the associated link between silicosis and lung cancer it is recommended that quartz concentrations be maintained as far below the TLV as prudent practices will allow.

Exposure to respirable crystalline silicas (RCS) represents a significant hazard to workers, particularly those employed in the construction industry where respirable dusts of of cement and concrete are common. Cutting, grinding and other high speed processes, involving their finished products, may further result in dusty atmospheres. Bricks are also a potential source of RCSs under such circumstances.

It is estimated that half of the occupations, involved in construction work, are exposed to levels of RCSs, higher than the current allowable limits. Beaudry et al: Journal of Occupational and Environmental Hygiene 10: 71-77; 2013

8.2. Exposure controls

8.2.1. Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.
8.2.2. Individual protection measures, such as personal protective equipment	
Eye and face protection	 Safety glasses with side shields. Chemical goggles.[AS/NZS 1337.1, EN166 or national equivalent] Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.
Skin protection	See Hand protection below
Hands/feet protection	 Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber
Body protection	See Other protection below
Other protection	 Overalls. P.V.C apron. Barrier cream. Skin cleansing cream. Eye wash unit.

Type A-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	A P1 Air-line*	-	A PAPR-P1 -
up to 50 x ES	Air-line**	A P2	A PAPR-P2
up to 100 x ES	-	A P3	-
		Air-line*	-
100+ x ES	-	Air-line**	A PAPR-P3

* - Negative pressure demand ** - Continuous flow

A(AII classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

8.2.3. Environmental exposure controls

See section 12

SECTION 9 Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Not Available		
Physical state	Free-flowing Paste	Relative density (Water = 1)	Not Available
Odour	Not Available	Partition coefficient n- octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Available	Decomposition temperature (°C)	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	>150	Molecular weight (g/mol)	Not Available
Flash point (°C)	Not Available	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water	Immiscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available
Heat of Combustion (kJ/g)	Not Available	Ignition Distance (cm)	Not Available
Flame Height (cm)	Not Available	Flame Duration (s)	Not Available
Enclosed Space Ignition Time Equivalent (s/m3)	Not Available	Enclosed Space Ignition Deflagration Density (g/m3)	Not Available
Nanoform Solubility	Not Available	Nanoform Particle Characteristics	Not Available
Particle Size	Not Available		

9.2. Other information

Not Available

SECTION 10 Stability and reactivity

10.1.Reactivity	See section 7.2
10.2. Chemical stability	 Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.

10.3. Possibility of hazardous reactions	See section 7.2
10.4. Conditions to avoid	See section 7.2
10.5. Incompatible materials	See section 7.2
10.6. Hazardous decomposition products	See section 5.3

SECTION 11 Toxicological information

11.1. Information on toxicological effects

a) Acute Toxicity	Based on available data, the classification criteria are not met.
b) Skin Irritation/Corrosion	Based on available data, the classification criteria are not met.
c) Serious Eye Damage/Irritation	Based on available data, the classification criteria are not met.
d) Respiratory or Skin sensitisation	Based on available data, the classification criteria are not met.
e) Mutagenicity	Based on available data, the classification criteria are not met.
f) Carcinogenicity	Based on available data, the classification criteria are not met.
g) Reproductivity	Based on available data, the classification criteria are not met.
h) STOT - Single Exposure	Based on available data, the classification criteria are not met.
i) STOT - Repeated Exposure	Based on available data, the classification criteria are not met.
j) Aspiration Hazard	Based on available data, the classification criteria are not met.
	l

Inhaled	
Ingestion	
Skin Contact	
Eye	
Chronic	

Lab Dutty Daga	ΤΟΧΙΟΙΤΥ	IRRITATION
Lab-Putty Base	Not Available	Not Available
	ΤΟΧΙCΙΤΥ	IRRITATION
silica crystalline - quartz	Oral (Rat) LD50: 500 mg/kg ^[2]	Not Available
	ΤΟΧΙCITY	IRRITATION
	dermal (rat) LD50: >2000 mg/kg ^[1]	Eye (Rodent - rabbit): 500mg/24H - Mild
zinc oxide	Inhalation (Rat) LC50: >1.79 mg/l4h ^[1]	Eye: no adverse effect observed (not irritating) ^[1]
Zinc Oxide	Oral (Rat) LD50: >5000 mg/kg ^[1]	Skin (Human): 300ug/3D (intermittent) - Mild
		Skin (Rodent - rabbit): 500mg/24H - Mild
		Skin: no adverse effect observed (not irritating) $\left[^{11}\right]$
Legend:	 Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances 	

	_		
Lab-Putty Base	Laboratory (in vitro) and animal studies show, ex the possibility of producing mutation.	xposure to the material may resul	t in a possible risk of irreversible effects, with
Acute Toxicity	×	Carcinogenicity	×
Skin Irritation/Corrosion	×	Reproductivity	×
Serious Eye Damage/Irritation	×	STOT - Single Exposure	×
Respiratory or Skin sensitisation	×	STOT - Repeated Exposure	×
Mutagenicity	×	Aspiration Hazard	×

X − Data either not available or does not fill the criteria for classification
 ✓ − Data available to make classification

11.2 Information on other hazards

11.2.1. Endocrine disrupting properties

No evidence of endocrine disrupting properties were found in the current literature.

11.2.2. Other information

See Section 11.1

SECTION 12 Ecological information

12.1. Toxicity

Lab-Putty Base	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Availabl
	Endpoint	Test Duration (hr)	Species	Value	Source
silica crystalline - quartz	Not Available	Not Available	Not Available	Not Available	Not Availabl
	Endpoint	Test Duration (hr)	Species	Value	Sourc
	BCF	1344h	Fish	19-110	7
	EC50	48h	Crustacea	0.105mg/L	2
-1	EC50	72h	Algae or other aquatic plants	0.022mg/L	2
zinc oxide	ErC50	72h	Algae or other aquatic plants	0.62mg/l	2
	EC50	96h	Algae or other aquatic plants	0.042mg/L	2
	EC10(ECx)	168h	Algae or other aquatic plants	0.003mg/L	2
	LC50	96h	Fish	0.102mg/L	2
Legend:	4. US EPA, Ec		ECHA Registered Substances - Ecotoxicologic ata 5. ECETOC Aquatic Hazard Assessment Da		

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

12.2. Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air	
	No Data available for all ingredients	No Data available for all ingredients	

12.3. Bioaccumulative potential

Ingredient	Bioaccumulation
zinc oxide	LOW (BCF = 217)

12.4. Mobility in soil

Ingredient	Mobility
	No Data available for all ingredients

12.5. Results of PBT and vPvB assessment

	Р	В	Т
Relevant available data	Not Available	Not Available	Not Available
PBT	×	×	×
vPvB	×	×	×
PBT Criteria fulfilled?			No
vPvB			No

12.6. Endocrine disrupting properties

No evidence of endocrine disrupting properties were found in the current literature.

No evidence of ozone depleting properties were found in the current literature.

SECTION 13 Disposal considerations

13.1. Waste treatment methods

Product / Packaging disposal	Dispose of waste according to applicable legislation. Special country-specific regulations may apply. Can be disposed together with household waste in compliance with official regulations in contact with approved waste disposal companies and with authorities in charge. (Only dispose of completely emptied packages.)
Waste treatment options	Not Available
Sewage disposal options	Not Available

SECTION 14 Transport information

Labels Required

Marine Pollutant	NO
HAZCHEM	Not Applicable

Land transport (ADR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Not Applicable				
Not Applicable				
Class	Not Appli			
Subsidiary Hazard	Subsidiary Hazard Not Applicable			
Not Applicable				
Not Applicable				
Hazard identification (Kemler)		Not Applicable		
Classification code		Not Applicable		
Hazard Label		Not Applicable		
Special provisions		Not Applicable		
Limited quantity		Not Applicable		
Transport Category		Not Applicable		
Tunnel Restriction C	ode	Not Applicable		
	Not Applicable Class Subsidiary Hazard Not Applicable Not Applicable Hazard identification Classification code Hazard Label Special provisions Limited quantity Transport Category	Not Applicable Class Not App Subsidiary Hazard Not App Not Applicable Not Applicable Hazard identification (Kemler) Classification code Hazard Label Special provisions Limited quantity Limited quantity		

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

	,			
14.1. UN number	Not Applicable			
14.2. UN proper shipping name	Not Applicable			
	ICAO/IATA Class	Not Applicable		
14.3. Transport hazard class(es)	ICAO / IATA Subsidiary Hazard	Not Applicable		
01033(03)	ERG Code	Not Applicable		
14.4. Packing group	Not Applicable	Not Applicable		
14.5. Environmental hazard	Not Applicable			
	Special provisions		Not Applicable	
	Cargo Only Packing Instructions		Not Applicable	
	Cargo Only Maximum Qty / Pack		Not Applicable	
14.6. Special precautions for user	Passenger and Cargo Packing Instructions		Not Applicable	
	Passenger and Cargo Maximum Qty / Pack		Not Applicable	
	Passenger and Cargo Limited Quantity Packing Instructions		Not Applicable	
	Passenger and Cargo Limited Maximum Qty / Pack		Not Applicable	

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1. UN number	Not Applicable			
14.2. UN proper shipping name	Not Applicable	Not Applicable		
14.3. Transport hazard class(es)	IMDG Class IMDG Subsidiary Haz	IMDG ClassNot ApplicableIMDG Subsidiary HazardNot Applicable		
14.4. Packing group	Not Applicable			
14.5 Environmental hazard	Not Applicable			
14.6. Special precautions for user	EMS Number Special provisions Limited Quantities	Not Applicable Not Applicable Not Applicable		

Inland waterways transport (ADN): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Not Applicable			
Not Applicable			
Not Applicable Not Applicable			
Not Applicable			
Not Applicable			
Classification code	Not Applicable		
Special provisions Not Applicable			
Limited quantity	Not Applicable		
Equipment required	Not Applicable		
Fire cones number	Not Applicable		
	Not Applicable Not Not Applicable Not Not Applicable Classification code Special provisions Limited quantity Equipment required Classification code		

14.7. Maritime transport in bulk according to IMO instruments

14.7.1. Transport in bulk according to Annex II of MARPOL and the IBC code Not Applicable

14.7.2. Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Product name	Group
silica crystalline - quartz	Not Available
zinc oxide	Not Available

14.7.3. Transport in bulk in accordance with the IGC Code

Product name	Ship Type
silica crystalline - quartz	Not Available
zinc oxide	Not Available

SECTION 15 Regulatory information

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

silica crystalline - quartz is found on the following regulatory lists

Chemical Footprint Project - Chemicals of High Concern List

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 1: Carcinogenic to humans UK Workplace Exposure Limits (WELs).

zinc oxide is found on the following regulatory lists

Great Britain GB Biocidal Active Substances

Great Britain GB mandatory classification and labelling list (GB MCL)

International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)

Additional Regulatory Information

Not Applicable

This safety data sheet is in compliance with the following EU legislation and its adaptations - as far as applicable - : Directives 98/24/EC, - 92/85/EEC, - 94/33/EC, - 2008/98/EC, - 2010/75/EU; Commission Regulation (EU) 2020/878; Regulation (EC) No 1272/2008 as updated through ATPs.

Information according to 2012/18/EU (Seveso III):

Seveso Category	Not Available

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

National Inventory Status

National Inventory	Status	
Australia - AIIC / Australia Non-Industrial Use	Yes	
Canada - DSL	Yes	
Canada - NDSL	No (silica crystalline - quartz)	
China - IECSC	Yes	
Europe - EINEC / ELINCS / NLP	Yes	
Japan - ENCS	Yes	
Korea - KECI	Yes	
New Zealand - NZIoC	Yes	
Philippines - PICCS	Yes	
USA - TSCA	All chemical substances in this product have been designated as TSCA Inventory 'Active'	
Taiwan - TCSI	Yes	
Mexico - INSQ	Yes	
Vietnam - NCI	Yes	
Russia - FBEPH	Yes	
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.	

SECTION 16 Other information

Revision Date	21/01/2025
Initial Date	08/02/2022

Full text Risk and Hazard codes

H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

SDS Version Summary

Version	Date of Update	Sections Updated
1.2	04/12/2024	Toxicological information - Acute Health (eye), Toxicological information - Acute Health (skin), Physical and chemical properties - Appearance, Toxicological information - Chronic Health, Hazards identification - Classification, Disposal considerations - Disposal, Exposure controls / personal protection - Engineering Control, Ecological Information - Environmental, Exposure controls / personal protection - Exposure Standard, Firefighting measures - Fire Fighter (fire/explosion hazard), Firefighting measures - Fire Fighter (fire/explosion hazard), Firefighting measures - Fire Fighter (fire/explosion hazard), Firefighting measures - Fire Fighter (fire fighting), First Aid measures - First Aid (eye), First Aid measures - First Aid (skin), Handling and storage - Handling Procedure, Composition / information on ingredients - Ingredients, Stability and reactivity - Instability Condition, Exposure controls / personal protection - Personal Protection (other), Exposure controls / personal protection - Personal Protection (eye), Exposure controls / personal protection - Personal Protection (eye), Exposure controls / personal protection - Personal Protection (hands/feet), Accidental release measures - Spills (minor), Handling and storage - Storage (storage incompatibility)

Other information

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available

engineering controls must be considered.

For detailed advice on Personal Protective Equipment, refer to the following EU CEN Standards:

- EN 166 Personal eye-protection
- EN 340 Protective clothing
- EN 374 Protective gloves against chemicals and micro-organisms
- EN 13832 Footwear protecting against chemicals
- EN 133 Respiratory protective devices

Definitions and abbreviations

- PC TWA: Permissible Concentration-Time Weighted Average
- PC STEL: Permissible Concentration-Short Term Exposure Limit
- IARC: International Agency for Research on Cancer
- ACGIH: American Conference of Governmental Industrial Hygienists
- STEL: Short Term Exposure Limit
- TEEL: Temporary Emergency Exposure Limit.
- IDLH: Immediately Dangerous to Life or Health Concentrations
- ES: Exposure Standard
- OSF: Odour Safety Factor
- NOAEL: No Observed Adverse Effect Level
- LOAEL: Lowest Observed Adverse Effect Level
- TLV: Threshold Limit Value
- LOD: Limit Of Detection
- OTV: Odour Threshold Value
- BCF: BioConcentration Factors
- BEI: Biological Exposure Index
- DNEL: Derived No-Effect Level
- PNEC: Predicted no-effect concentration
- MARPOL: International Convention for the Prevention of Pollution from Ships
- IMSBC: International Maritime Solid Bulk Cargoes Code
- IGC: International Gas Carrier Code
- IBC: International Bulk Chemical Code
- AIIC: Australian Inventory of Industrial Chemicals
- DSL: Domestic Substances List
- NDSL: Non-Domestic Substances List
- IECSC: Inventory of Existing Chemical Substance in China
- EINECS: European INventory of Existing Commercial chemical Substances
- ELINCS: European List of Notified Chemical Substances
- NLP: No-Longer Polymers
- ENCS: Existing and New Chemical Substances Inventory
- KECI: Korea Existing Chemicals Inventory
- NZIoC: New Zealand Inventory of Chemicals
- PICCS: Philippine Inventory of Chemicals and Chemical Substances
- TSCA: Toxic Substances Control Act
- TCSI: Taiwan Chemical Substance Inventory
- INSQ: Inventario Nacional de Sustancias Químicas
- NCI: National Chemical Inventory
- + FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]

Classification according to regulation (EC) No 1272/2008 [CLP] and amendments	Classification Procedure
Hazardous to the Aquatic Environment Long-Term	Calculation method
Hazard Category 3, H412	

Powered by AuthorITe, from Chemwatch.

COLTENE

Lab-Putty Activator

Coltène/Whaledent AG

Version No: 6.7

Safety Data Sheet according to the United Nations GHS (Rev. 10, 2023)

Issue Date: 20/01/2025 Print Date: 17/04/2025 L.REACH.GB.EN

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

1.1. Product Identifier

Product name	Lab-Putty Activator
Chemical Name	Not Applicable
Synonyms	Not Available
Chemical formula	Not Applicable
Other means of identification	UFI: 6YFS-E0CC-U00E-DFMR

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

Relevant identified uses	For dental use only Use according to manufacturer's directions.
Uses advised against	No specific uses advised against are identified.

1.3. Details of the manufacturer or supplier of the safety data sheet

Registered company name	Coltène/Whaledent AG
Address	Feldwiesenstrasse 20 Altstätten 9450 Switzerland
Telephone	+41 (71) 75 75 300
Fax	+41 (71) 75 75 301
Website	www.coltene.com
Email	msds@coltene.com

1.4. Emergency telephone number

Association / Organisation	CHEMWATCH EMERGENCY RESPONSE (24/7)
Emergency telephone number(s)	+44 20 3901 3542 (ID#: 9-901772)
Other emergency telephone number(s)	+44 808 164 9592

SECTION 2 Hazards identification

2.1. Classification of the substance or mixture

Classified according to	H226 - Flammable Liquids Category 3, H315 - Skin Corrosion/Irritation Category 2, H319 - Serious Eye Damage/Eye Irritation
GB-CLP Regulation, UK SI	Category 2, H332 - Acute Toxicity (Inhalation) Category 4, H335 - Specific Target Organ Toxicity - Single Exposure (Respiratory
2019/720 and UK SI	Tract Irritation) Category 3, H371 - Specific Target Organ Toxicity - Single Exposure Category 2, H373 - Specific Target Organ
2020/1567 ^[1]	Toxicity - Repeated Exposure Category 2, H413 - Hazardous to the Aquatic Environment Long-Term Hazard Category 4
Legend:	1. Classified by Chemwatch; 2. Classification drawn from GB-CLP Regulation, UK SI 2019/720 and UK SI 2020/1567

2.2. Label elements



Hazard statement(s)

H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H371	May cause damage to organs. (Lymphatic system) (Oral)
H373	May cause damage to organs through prolonged or repeated exposure.
H413	May cause long lasting harmful effects to aquatic life.

Supplementary statement(s)

Not Applicable

Precautionary statement(s) Prevention

P260	o not breathe mist/vapours/spray.	
P280	Wear protective gloves, protective clothing, eye protection and face protection.	

Precautionary statement(s) Response

P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P332+P313	If skin irritation occurs: Get medical advice/attention.

Precautionary statement(s) Storage

P405	Store locked up.

Precautionary statement(s) Disposal

P501 Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

Material contains Silanamine, 1,1,1-trimethyl-N- (trimethylsilyl)-, hydrolysis products with silica, white mineral oil (petroleum), Alkyl silicate, di-n-octyltin oxide.

2.3. Other hazards

Limited evidence of a carcinogenic effect*.

Vapours potentially cause drowsiness and dizziness*.

*LIMITED EVIDENCE

REACH - Art.57-59: The mixture does not contain Substances of Very High Concern (SVHC) at the SDS print date.

SECTION 3 Composition / information on ingredients

3.1.Substances

See 'Composition on ingredients' in Section 3.2

3.2.Mixtures

1. CAS No 2.EC No 3.Index No 4.REACH No	% [weight]	Name	Classified according to GB-CLP Regulation, UK SI 2019/720 and UK SI 2020/1567	SCL / M- Factor	Nanoform Particle Characteristics
1. 8042-47-5 2.232-455-8 3.Not Available 4.Not Available	15-25	<u>white mineral oil</u> (<u>petroleum)</u>	Aspiration Hazard Category 1; H304 ^[1]	SCL: Not Available Acute M factor: Not Applicable Chronic M factor: Not Applicable	Not Available

1. CAS No 2.EC No 3.Index No 4.REACH No	% [weight]	Name	Classified according to GB-CLP Regulation, UK SI 2019/720 and UK SI 2020/1567	SCL / M- Factor	Nanoform Particle Characteristics
1. Not Available 2.Not Available 3.Not Available 4.Not Available	10-25	<u>Alkyl silicate</u>	Flammable Liquids Category 3, Skin Corrosion/Irritation Category 2, Serious Eye Damage/Eye Irritation Category 2, Acute Toxicity (Inhalation) Category 3, Specific Target Organ Toxicity - Single Exposure (Respiratory Tract Irritation) Category 3, Specific Target Organ Toxicity - Repeated Exposure Category 2, Hazardous to the Aquatic Environment Long-Term Hazard Category 4; H226, H315, H319, H331, H335, H373, H413 ^[1]	SCL: Not Available Acute M factor: Not Applicable Chronic M factor: Not Applicable	Not Available
1. 870-08-6 2.212-791-1 3.Not Available 4.Not Available	1-10	<u>di-n-octyltin oxide</u>	Specific Target Organ Toxicity - Single Exposure Category 2; H371 ^[1]	SCL: Not Available Acute M factor: Not Applicable Chronic M factor: Not Applicable	Not Available
1. 68299-15-0 2.269-595-4 3.Not Available 4.Not Available	1-10	<u>dioctyltin</u> <u>dinonanoate</u>	Specific Target Organ Toxicity - Single Exposure Category 2; H371 ^[1]	SCL: Not Available Acute M factor: Not Applicable Chronic M factor: Not Applicable	Not Available
1. 68909-20-6 2.272-697-1 3.014-052-00-7 4.Not Available	25-30	Silanamine, 1,1,1,1 trimethyl-N- (trimethylsilyl)-, hydrolysis products with silica	Specific Target Organ Toxicity - Repeated Exposure Category 2; H373, EUH066 ^[1]	SCL: Not Available Acute M factor: Not Applicable Chronic M factor: Not Applicable	Not Available
Legend:			nssification drawn from GB-CLP Regulation, UK SI 2019/7 U IOELVs available; [e] Substance identified as having en	Applicable	

SECTION 4 First aid measures

4.1. Description of first aid measures

Eye Contact	 If this product comes in contact with the eyes: Wash out immediately with fresh running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	 If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Inhalation	 If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor, without delay.
Ingestion	 Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11

Treat symptomatically.

SECTION 5 Firefighting measures

5.1. Extinguishing media

Use extinguishing media suitable for surrounding area.

5.2. Special hazards arising from the substrate or mixture

Fire Incompatibility Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

5.3. Advice for firefighters

Fire Fighting	 Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water courses. Use fire fighting procedures suitable for surrounding area. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use.
Fire/Explosion Hazard	 Flammable May emit poisonous fumes. May emit corrosive fumes.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

See section 8

6.2. Environmental precautions

See section 12

6.3. Methods and material for containment and cleaning up

Minor Spills	 Remove all ignition sources. Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Contain and absorb small quantities with vermiculite or other absorbent material. Wipe up. Collect residues in a flammable waste container.
Major Spills	 Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear full body protective clothing with breathing apparatus. Prevent, by all means available, spillage from entering drains or water courses. Consider evacuation (or protect in place). No smoking, naked lights or ignition sources. Increase ventilation. Stop leak if safe to do so. Water spray or fog may be used to disperse / absorb vapour. Contain or absorb spill with sand, earth or vermiculite. Collect recoverable product into labelled containers for recycling. Collect solid residues and seal in labelled drums for disposal. Wash area and prevent runoff into drains. After clean up operations, decontaminate and launder all protective clothing and equipment before storing and re-using. If contamination of drains or waterways occurs, advise emergency services.

6.4. Reference to other sections

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 Handling and storage

Safe handling Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps. DO NOT allow material to contact humans, exposed food or food utensils. Avoid contact with incompatible materials. Avoid contact with incompatible materials.

	 When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling. Work clothes should be laundered separately. Launder contaminated clothing before re-use. Use good occupational work practice.
Fire and explosion protection	See section 5
Other information	 Store in original containers. Keep containers securely sealed. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this SDS.

7.2. Conditions for safe storage, including any incompatibilities

Suitable container	Recommended storage temperature: 15 - 23 °C Metal can or drum Packaging as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.
Storage incompatibility	None known.
Hazard categories in accordance with Regulation (EC) No 2012/18/EU (Seveso III)	P5a: Flammable Liquids, P5b: Flammable Liquids, P5c: Flammable Liquids
Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of	P5a Lower- / Upper-tier requirements: 10 / 50 P5b Lower- / Upper-tier requirements: 50 / 200 P5c Lower- / Upper-tier requirements: 5 000 / 50 000

7.3. Specific end use(s)

See section 1.2

SECTION 8 Exposure controls / personal protection

8.1. Control parameters

Ingredient	DNELs Exposure Pattern Worker	PNECs Compartment
white mineral oil (petroleum)	Dermal 217.05 mg/kg bw/day (Systemic, Chronic) Inhalation 164.56 mg/m ³ (Systemic, Chronic) Dermal 93.02 mg/kg bw/day (Systemic, Chronic) * Inhalation 0.03478 mg/m ³ (Systemic, Chronic) * Oral 25 mg/kg bw/day (Systemic, Chronic) *	Not Available
di-n-octyltin oxide	Oral 0.002 mg/kg bw/day (Systemic, Chronic) *	Not Available
dioctyltin dinonanoate	Dermal 0.0175 mg/kg bw/day (Systemic, Chronic) Inhalation 0.0617 mg/m ³ (Systemic, Chronic) Dermal 0.00625 mg/kg bw/day (Systemic, Chronic) * Inhalation 0.0109 mg/m ³ (Systemic, Chronic) * Oral 0.00625 mg/kg bw/day (Systemic, Chronic) *	Not Available

* Values for General Population

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
UK Workplace Exposure Limits (WELs).	di-n-octyltin oxide	Tin compounds, organic, except Cyhexatin (ISO), (as Sn)	0.1 mg/m3	0.2 mg/m3	Not Available	Sk
UK Workplace Exposure Limits (WELs).	dioctyltin dinonanoate	Tin compounds, organic, except Cyhexatin (ISO), (as Sn)	0.1 mg/m3	0.2 mg/m3	Not Available	Sk
UK Workplace Exposure Limits (WELs).	Silanamine, 1,1,1-trimethyl-N- (trimethylsilyl)-, hydrolysis products with silica	Silica, amorphous: respirable dust	2.4 mg/m3	Not Available	Not Available	Not Available
UK Workplace Exposure Limits (WELs).	Silanamine, 1,1,1-trimethyl-N- (trimethylsilyl)-, hydrolysis products	Silica, amorphous: inhalable dust	6 mg/m3	Not Available	Not Available	Not Available

Source	Ingredient	Material name		TWA	STEL	Peak	Notes
	with silica						
Ingredient	Original IDLH		Revised	IDLH			
white mineral oil (petroleum)	2,500 mg/m3		Not Ava	ilable			
Alkyl silicate	Not Available		Not Ava	ilable			
di-n-octyltin oxide	25 mg/m3		Not Ava	ilable			
dioctyltin dinonanoate	25 mg/m3		Not Ava	ilable			
Silanamine, 1,1,1-trimethyl- N- (trimethylsilyl)-, hydrolysis products with silica	Not Available		Not Ava	ilable			

MATERIAL DATA

Exposure limits with "skin" notation indicate that vapour and liquid may be absorbed through intact skin. Absorption by skin may readily exceed vapour inhalation exposure. Symptoms for skin absorption are the same as for inhalation. Contact with eyes and mucous membranes may also contribute to overall exposure and may also invalidate the exposure standard.

The no/lowest-observed-adverse-effect levels (NOAELs or LOAELs) in inhalation studies involving tri-n-butyltin chloride and bromide are 0.3-0.4 ppm (2-4 mg/m3) based on changes in the lungs, heart, liver, kidneys, nervous system and reproductive system in rodents. Oral administration of organotin compounds has induced toxicity in a number of differing organ systems, organs and lungs. The LOAEL for triethyltin bromide was 0.4 mg triethyltin/kg/day as 5 ppm in drinking water. The LOAELs for the most critical organ sites in rats (i.e. the cellular immune response and CNS effects) are 0.15 and 0.23 mg/tin/kg body weight/day. Experience with ingested tri- and diethyltins in the treatment of staphylococcal infections, osteomyelitis, anthrax and acne suggests that humans react in a manner similar to rodents, but that the human is more sensitive to absorbed organic tin. The recommended TLV-TWA is thought to minimise the potential for adverse effects on immune function and the central nervous system. A STEL is also recommended to minimise acute symptoms such as eye and respiratory tract irritation, headaches and/or nausea. Based on an exposure to 0.1 mg/m3, a 70-kg worker breathing 10 m3 of air/8hr workday and assuming complete retention of the inhaled dose, would receive a daily exposure of 14.3 ug tin/kg body weight of an organotin compound. A skin notation was recommended based on animal data and the potential danger of enhanced absorption due to damaged skin present in many exposed workers.

for mineral oils (excluding metal working fluids), pure, highly and severely refined:

Human exposure to oil mist alone has not been demonstrated to cause health effects except at levels above 5 mg/m3 (this applies to particulates sampled by a method that does not collect vapour). It is not advisable to apply this standard to oils containing unknown concentrations and types of additive.

8.2. Exposure controls

	Local exhaust ventilation is normally required. If there is a ris suitably tested breathing apparatus. For maximum protection may be required in special circumstances. Ensure that there The airborne contaminants generated in the workplace have velocities' of fresh circulating air. This in turn is necessary in	n, a correct fit of the respirator is essential. is adequate ventilation in the warehouse o different 'escape' velocities, which are the	r enclosed storage areas. determine the 'securing
	Type of soiling		Air exchange
	Solvents, vapours, degreasing agents, evaporating from ta	anks	0.25-0.5 m/s (50-100 f/min)
	Aerosols, vapours from tapping, interrupted filling of contain spray mist, galvanic metal vapours, pickling	iners, slow belt conveyors, welding,	0.5-1 m/s (100-200 f/min)
	Direct spray jet, painting systems Filling of drums, belt fillir	ng, dusts, gas release	1-2.5 m/s (200-500 f/min)
8.2.1. Appropriate engineering controls	Sanding, sandblasting work, dust moved by fans		2.5-10 m/s (500-2000 f/min)
	Within the ranges, the appropriate value depends on		
	Lower limit of the range	Upper limit of the range	
	1. room air flows minimally	1. disturbing air currents	_
	2. pollution of low toxicity disturbing extent	2. Verschmutzungen hoher Toxizität oder	_
	3. interrupted, low output	3. high output	_
	4. large fume cupboard or large volumes of air in motion	4. small deduction, local control only	
	Practical experience shows that the air velocity decreases were very quickly (in simple cases with the square of the distance regulated with reference to the contamination level. The flow f/min) at a distance of 2 metres from the extraction system. Of the extraction system make it necessary to increase the theory using the system.). Therefore, the flow velocity at the system velocity at the extraction fan should be at l Other mechanical aspects that cause perfor	should therefore be east 1-2 m/s (200-400 mance deficits within the
8.2.2. Individual protection measures, such as personal protective equipment			

Eye and face protection

Safety glasses with side shields.

Chemical goggles. [AS/NZS 1337.1, EN166 or national equivalent]

Lab-Putty Activator

	Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59].
Skin protection	See Hand protection below
Hands/feet protection	 Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber
Body protection	See Other protection below
Other protection	 Overalls. P.V.C apron. Barrier cream. Skin cleansing cream. Eye wash unit.

Respiratory protection

Type A-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required. Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	A-AUS P2	-	A-PAPR-AUS / Class 1 P2
up to 50 x ES	-	A-AUS / Class 1 P2	-
up to 100 x ES	-	A-2 P2	A-PAPR-2 P2 ^

^ - Full-face

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

8.2.3. Environmental exposure controls

See section 12

SECTION 9 Physical and chemical properties

9.1. Information on basic physical and chemical properties

Blue		
Free-flowing Paste	Relative density (Water = 1)	1.0
Not Available	Partition coefficient n- octanol / water	Not Available
Not Available	Auto-ignition temperature (°C)	Not Available
Not Available	Decomposition temperature (°C)	Not Available
Not Available	Viscosity (cSt)	Not Available
>150	Molecular weight (g/mol)	Not Available
Not Available	Taste	Not Available
Not Available	Explosive properties	Not Available
Flammable.	Oxidising properties	Not Available
Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Not Available	Volatile Component (%vol)	Not Available
Not Available	Gas group	Not Available
Immiscible	pH as a solution (1%)	Not Available
Not Available	VOC g/L	Not Available
Not Available	Ignition Distance (cm)	Not Available
Not Available	Flame Duration (s)	Not Available
	Free-flowing Paste Not Available Not Available Not Available Not Available Not Available >150 Not Available Inot Available Not Available	Free-flowing Paste Relative density (Water = 1) Not Available Partition coefficient n- octanol / water Not Available Auto-ignition temperature (°C) Not Available Decomposition temperature (°C) Not Available Uiscosity (cSt) Not Available Viscosity (cSt) Not Available Molecular weight (g/mol) Not Available Explosive properties Not Available Oxidising properties Flammable. Oxidising properties Not Available Surface Tension (dyn/cm or mN/m) Not Available Gas group Immiscible PH as a solution (1%) Not Available Ignition Distance (cm)

Enclosed Space Ignition Time Equivalent (s/m3)	Not Available	Enclosed Space Ignition Deflagration Density (g/m3)	Not Available
Nanoform Solubility	Not Available	Nanoform Particle Characteristics	Not Available
Particle Size	Not Available		

9.2. Other information

Not Available

SECTION 10 Stability and reactivity

10.1.Reactivity	See section 7.2
10.2. Chemical stability	Product is considered stable and hazardous polymerisation will not occur.
10.3. Possibility of hazardous reactions	See section 7.2
10.4. Conditions to avoid	See section 7.2
10.5. Incompatible materials	See section 7.2
10.6. Hazardous decomposition products	See section 5.3

SECTION 11 Toxicological information

11.1. Information on toxicological effects

	5		
a) Acute Toxicity	There is sufficient evidence to classify this material as acutely to	xic.	
b) Skin Irritation/Corrosion	There is sufficient evidence to classify this material as skin corros	sive or irritating.	
c) Serious Eye Damage/Irritation	here is sufficient evidence to classify this material as eye damaging or irritating		
d) Respiratory or Skin sensitisation	Based on available data, the classification criteria are not met.		
e) Mutagenicity	Based on available data, the classification criteria are not met.		
f) Carcinogenicity	Based on available data, the classification criteria are not met.		
g) Reproductivity	Based on available data, the classification criteria are not met.	sed on available data, the classification criteria are not met.	
h) STOT - Single Exposure	There is sufficient evidence to classify this material as toxic to sp	ere is sufficient evidence to classify this material as toxic to specific organs through single exposure	
i) STOT - Repeated Exposure	There is sufficient evidence to classify this material as toxic to sp	ecific organs through repeated exposure	
j) Aspiration Hazard	Based on available data, the classification criteria are not met.		
Inhaled	The material can cause respiratory irritation in some persons.		
Ingestion	Good hygiene practice requires that exposure has to be kept to a	a minimum.	
Skin Contact	Evidence exists, or practical experience predicts, that the material number of individuals following direct contact, and/or produces si animals, for up to four hours, such inflammation being present tw Skin irritation may also be present after prolonged or repeated ex (nonallergic). The dermatitis is often characterised by skin redness blistering (vesiculation), scaling and thickening of the epidermis. the spongy layer of the skin (spongiosis) and intracellular oedem. The material may accentuate any pre-existing dermatitis conditio Open cuts, abraded or irritated skin should not be exposed to this	ignificant inflammation when applied to the healthy intact skin o venty-four hours or more after the end of the exposure period. kposure; this may result in a form of contact dermatitis ss (erythema) and swelling (oedema) which may progress to At the microscopic level there may be intercellular oedema of a of the epidermis.	
Eye	Evidence exists, or practical experience predicts, that the materia and/or may produce significant ocular lesions which are present t experimental animals. Repeated or prolonged eye contact may cause inflammation cha conjunctiva (conjunctivitis); temporary impairment of vision and/o	twenty-four hours or more after instillation into the eye(s) of rracterised by temporary redness (similar to windburn) of the	
		offer transient eye damage/decration may beed.	
Chronic	problems.	of the airways involving difficult breathing and related systemic	
Chronic		, , ,	
Chronic Lab-Putty Activator	problems.	of the airways involving difficult breathing and related systemic	

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tion (Rat) LC50: >4.5 mg/l4h ^[1] Rat) LD50: >5000 mg/kg ^[2]	Skin: no adverse effect observed (not irritating) ^[1]
ΥΤΥ	
	IRRITATION
vailable	Not Available
УТГ	IRRITATION
Rat) LD50: 2500 mg/kg ^[2]	Eye: no adverse effect observed (not irritating) ^[1]
	Skin: no adverse effect observed (not irritating) $\left[^{1}\right]$
УТТҮ	IRRITATION
ıl (rat) LD50: >=2000 mg/kg ^[1]	Eye: no adverse effect observed (not irritating) ^[1]
Rat) LD50: >2000 mg/kg ^[1]	Skin: no adverse effect observed (not irritating) ^[1]
SITY	IRRITATION
Rat) LD50: >5000 mg/kg ^[2]	Not Available
F	CITY Rat) LD50: 2500 mg/kg ^[2] CITY al (rat) LD50: >=2000 mg/kg ^[1] Rat) LD50: >2000 mg/kg ^[1] CITY Rat) LD50: >5000 mg/kg ^[2]

Acute Toxicity	×	Carcinogenicity	×
Skin Irritation/Corrosion	×	Reproductivity	×
Serious Eye Damage/Irritation	×	STOT - Single Exposure	*
Respiratory or Skin sensitisation	×	STOT - Repeated Exposure	*
Mutagenicity	×	Aspiration Hazard	×
	Le	gend:	ilable or does not fill the criteria for classification nake classification

11.2 Information on other hazards

11.2.1. Endocrine disrupting properties

No evidence of endocrine disrupting properties were found in the current literature.

11.2.2. Other information

See Section 11.1

SECTION 12 Ecological information

12.1. Toxicity

	Endpoint	Test Duration (hr)	Species	Value	Source
Lab-Putty Activator	Not Available	Not Available	Not Available	Not Available	Not Available
White mineral oil	Endpoint	Test Duration (hr)	Species	Value	Source
(petroleum)	LC50	96h	Fish	>10000mg/L	2
	Endpoint	Test Duration (hr)	Species	Value	Source
Alkyl silicate	Not Available	Not Available	Not Available	Not Available	Not Available
	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50	48h	Crustacea	>0.21mg/l	2
Dioctyltin oxide	EC50	72h	Algae or other aquatic plants	>0.002mg/l	2
	NOEC(ECx)	24h	Crustacea	0.001mg/l	2
	LC50	96h	Fish	>0.09mg/l	2

	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50	48h	Crustacea	0.17mg/l	2
	EC50	72h	Algae or other aquatic plants	0.17mg/l	2
Dioctyltin dineodecanote	LC50	96h	Fish	>5.8mg/l	2
	EC50	96h	Algae or other aquatic plants	89mg/l	2
	EC10(ECx)	72h	Algae or other aquatic plants	>0.014mg/L	2
Silanamine, 1,1,1-trimethyl-	Endpoint	Test Duration (hr)	Species	Value	Source
N- (trimethylsilyl)-, hydrolysis products with silica	Not Available	Not Available	Not Available	Not Available	Not Available
Legend:	4. US EPA, Ed	• •	ECHA Registered Substances - Ecotoxicologi ata 5. ECETOC Aquatic Hazard Assessment D		

May cause long-term adverse effects in the aquatic environment.

Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.

Wastes resulting from use of the product must be disposed of on site or at approved waste sites.

DO NOT discharge into sewer or waterways.

12.2. Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
di-n-octyltin oxide	HIGH	HIGH

12.3. Bioaccumulative potential

Ingredient	Bioaccumulation
white mineral oil (petroleum)	HIGH (LogKOW = 5.18)
di-n-octyltin oxide	LOW (BCF = 100)
dioctyltin dinonanoate	LOW (LogKOW = 12.16)

12.4. Mobility in soil

Ingredient	Mobility
di-n-octyltin oxide	LOW (Log KOC = 202700)

12.5. Results of PBT and vPvB assessment

	Р	В	т
Relevant available data	Not Available	Not Available	Not Available
PBT	×	×	×
vPvB	×	×	×
PBT Criteria fulfilled?			No
vPvB			No

12.6. Endocrine disrupting properties

No evidence of endocrine disrupting properties were found in the current literature.

12.7. Other adverse effects

One or more ingredients within this SDS has the potential of causing ozone depletion and/or photochemical ozone creation.

SECTION 13 Disposal considerations

13.1. Waste treatment methods

Product / Packaging	Product
disposal	Waste code number: 18 01 06* Chemicals consisting of or containing hazardous substances.
	Product and product residues must not be disposed of together with household waste. Disposal must be in accordance with the applicable laws.
	In Switzerland, the Ordinance on the Prevention and Disposal of Waste (Waste Ordinance, VVEA; SR 814.600), the Ordinance on the Transport of Waste (VeVA; SR 814.610) and the DETEC Ordinance on Lists on the Transport of Waste (SR 814.610.1) apply.
	Disposal of contaminated packaging

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	Waste code number: 15 01 10* packaging containing residues of substances or special wastes with particularly hazardous properties or contaminated by substances or special wastes with particularly hazardous properties. Disposal of empty packaging Waste code number: 15 01 04 Metal packaging. If packaging is not completely empty, it is not subject to waste code number 15 01 04 and must be disposed of properly and without damage by the end user in accordance with the disposal of contaminated packaging and waste code number 15 01 10*.
Waste treatment options	Not Available
Sewage disposal options	Not Available

SECTION 14 Transport information

Labels Required

Marine Pollutant	NO
HAZCHEM	Not Applicable

Land transport (ADR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1. UN number or ID number	Not Applicable			
14.2. UN proper shipping name	Not Applicable			
14.3. Transport hazard	Class	Not Appli	able	
class(es)	Subsidiary Hazard	Not Appli	able	
14.4. Packing group	Not Applicable			
14.5. Environmental hazard	Not Applicable			
	Hazard identification	(Kemler)	Not Applicable	
	Classification code		Not Applicable	
	Hazard Label		Not Applicable	
14.6. Special precautions for user	Special provisions		Not Applicable	
	Limited quantity		Not Applicable	
	Transport Category		Not Applicable	
	Tunnel Restriction C	ode	Not Applicable	

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

• •				
14.1. UN number	Not Applicable			
14.2. UN proper shipping name	Not Applicable			
	ICAO/IATA Class	Not Applicable		
14.3. Transport hazard class(es)	ICAO / IATA Subsidiary Hazard	Not Applicable		
01035(03)	ERG Code	Not Applicable		
14.4. Packing group	Not Applicable			
14.5. Environmental hazard	Not Applicable			
	Special provisions		Not Applicable	
	Cargo Only Packing Instructions		Not Applicable	
	Cargo Only Maximum Qty / Pack		Not Applicable	
14.6. Special precautions for user	Passenger and Cargo Packing Instructions		Not Applicable	
	Passenger and Cargo Maximum Qty / Pack		Not Applicable	
	Passenger and Cargo Limited Qu	uantity Packing Instructions	Not Applicable	
	Passenger and Cargo Limited Maximum Qty / Pack		Not Applicable	

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1. UN number	Not Applicable	
	Not Applicable	

14.2. UN proper shipping name			
14.3. Transport hazard class(es)	IMDG Class	Not Applicable	
	IMDG Subsidiary Hazar	rd Not Applicable	
14.4. Packing group	Not Applicable		
14.5 Environmental hazard	Not Applicable		
14.6. Special precautions for user	EMS Number N	lot Applicable	
	Special provisions N	lot Applicable	
	Limited Quantities N	lot Applicable	

Inland waterways transport (ADN): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1. UN number	Not Applicable				
14.2. UN proper shipping name	Not Applicable				
14.3. Transport hazard class(es)	Not Applicable Not Applicable				
14.4. Packing group	Not Applicable				
14.5. Environmental hazard	Not Applicable				
14.6. Special precautions for user	Classification code	Not Applicable			
	Special provisions	Not Applicable			
	Limited quantity	Not Applicable			
	Equipment required	Not Applicable			
	Fire cones number	Not Applicable			

14.7. Maritime transport in bulk according to IMO instruments

14.7.1. Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

14.7.2. Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Product name	Group
white mineral oil (petroleum)	Not Available
Alkyl silicate	Not Available
di-n-octyltin oxide	Not Available
dioctyltin dinonanoate	Not Available
Silanamine, 1,1,1-trimethyl- N- (trimethylsilyl)-, hydrolysis products with silica	Not Available

14.7.3. Transport in bulk in accordance with the IGC Code

Product name	Ship Type
white mineral oil (petroleum)	Not Available
Alkyl silicate	Not Available
di-n-octyltin oxide	Not Available
dioctyltin dinonanoate	Not Available
Silanamine, 1,1,1-trimethyl- N- (trimethylsilyl)-, hydrolysis products with silica	Not Available

SECTION 15 Regulatory information

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

white mineral oil (petroleum) is found on the following regulatory lists

Chemical Footprint Project - Chemicals of High Concern List

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

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International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 1: Carcinogenic to humans International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Not Classified as Carcinogenic

Alkyl silicate is found on the following regulatory lists

Not Applicable

di-n-octyltin oxide is found on the following regulatory lists

Chemical Footprint Project - Chemicals of High Concern List

Great Britain GB PIC List of Chemicals - Part 1 - Chemicals subject to export notification procedure (referred to in Article 8 of the PIC Regulation) International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)

UK Workplace Exposure Limits (WELs).

dioctyltin dinonanoate is found on the following regulatory lists

Chemical Footprint Project - Chemicals of High Concern List

Great Britain GB PIC List of Chemicals - Part 1 - Chemicals subject to export notification procedure (referred to in Article 8 of the PIC Regulation) UK Workplace Exposure Limits (WELs).

Silanamine, 1,1,1-trimethyl-N- (trimethylsilyl)-, hydrolysis products with silica is found on the following regulatory lists

Great Britain GB Biocidal Active Substances

Great Britain GB mandatory classification and labelling (GB MCL) technical reports

Great Britain GB mandatory classification and labelling list (GB MCL)

International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)

UK Workplace Exposure Limits (WELs).

Additional Regulatory Information

Not Applicable

This safety data sheet is in compliance with the following EU legislation and its adaptations - as far as applicable - : Directives 98/24/EC, - 92/85/EEC, - 94/33/EC, - 2008/98/EC, - 2010/75/EU; Commission Regulation (EU) 2020/878; Regulation (EC) No 1272/2008 as updated through ATPs.

Information according to 2012/18/EU (Seveso III):

Seveso Category P5a, P5b, P5c

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

National Inventory Status

National Inventory	Status
Australia - AIIC / Australia Non-Industrial Use	Yes
Canada - DSL	Yes
Canada - NDSL	No (white mineral oil (petroleum); di-n-octyltin oxide; dioctyltin dinonanoate; Silanamine, 1,1,1-trimethyl-N- (trimethylsilyl)-, hydrolysis products with silica)
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	Yes
Japan - ENCS	No (Silanamine, 1,1,1-trimethyl-N- (trimethylsilyl)-, hydrolysis products with silica)
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	Yes
USA - TSCA	All chemical substances in this product have been designated as TSCA Inventory 'Active'
Taiwan - TCSI	Yes
Mexico - INSQ	No (di-n-octyltin oxide; dioctyltin dinonanoate; Silanamine, 1,1,1-trimethyl-N- (trimethylsilyl)-, hydrolysis products with silica)
Vietnam - NCI	Yes
Russia - FBEPH	No (dioctyltin dinonanoate; Silanamine, 1,1,1-trimethyl-N- (trimethylsilyl)-, hydrolysis products with silica)
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.

SECTION 16 Other information

Revision Date	20/01/2025
Initial Date	08/02/2022

Full text Risk and Hazard codes

H304	May be fatal if swallowed and enters airways.
H331	Toxic if inhaled.

SDS Version Summary

Version	Date of Update	Sections Updated
5.7	09/12/2024	Toxicological information - Acute Health (inhaled), Toxicological information - Acute Health (skin), Toxicological information - Chronic Health, Hazards identification - Classification, Disposal considerations - Disposal, Exposure controls / personal protection - Engineering Control, Exposure controls / personal protection - Exposure Standard, Firefighting measures - Fire Fighter (fire/explosion hazard), Firefighting measures - Fire Fighter (fire incompatibility), Composition / information on ingredients - Ingredients, Exposure controls / personal protection - Personal Protection (other), Accidental release measures - Spills (major), Handling and storage - Storage (storage incompatibility)

Other information

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

For detailed advice on Personal Protective Equipment, refer to the following EU CEN Standards:

EN 166 Personal eye-protection

EN 340 Protective clothing

- EN 374 Protective gloves against chemicals and micro-organisms
- EN 13832 Footwear protecting against chemicals
- EN 133 Respiratory protective devices

Definitions and abbreviations

- PC TWA: Permissible Concentration-Time Weighted Average
- PC STEL: Permissible Concentration-Short Term Exposure Limit
- IARC: International Agency for Research on Cancer
- ACGIH: American Conference of Governmental Industrial Hygienists
- STEL: Short Term Exposure Limit
- TEEL: Temporary Emergency Exposure Limit。
- IDLH: Immediately Dangerous to Life or Health Concentrations
- ES: Exposure Standard
- OSF: Odour Safety Factor
- NOAEL: No Observed Adverse Effect Level
- LOAEL: Lowest Observed Adverse Effect Level
- TLV: Threshold Limit Value
- LOD: Limit Of Detection
- OTV: Odour Threshold Value
- BCF: BioConcentration Factors
- BEI: Biological Exposure Index
- DNEL: Derived No-Effect Level
- PNEC: Predicted no-effect concentration
- MARPOL: International Convention for the Prevention of Pollution from Ships
- IMSBC: International Maritime Solid Bulk Cargoes Code
- IGC: International Gas Carrier Code
- IBC: International Bulk Chemical Code
- AIIC: Australian Inventory of Industrial Chemicals
- DSL: Domestic Substances List
- NDSL: Non-Domestic Substances List
- IECSC: Inventory of Existing Chemical Substance in China
- EINECS: European INventory of Existing Commercial chemical Substances
- ELINCS: European List of Notified Chemical Substances
- NLP: No-Longer Polymers
- ENCS: Existing and New Chemical Substances Inventory
- KECI: Korea Existing Chemicals Inventory
- NZIoC: New Zealand Inventory of Chemicals
- PICCS: Philippine Inventory of Chemicals and Chemical Substances
- TSCA: Toxic Substances Control Act
- TCSI: Taiwan Chemical Substance Inventory
- INSQ: Inventario Nacional de Sustancias Químicas
- NCI: National Chemical Inventory
- FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]

Classification according to regulation (EC) No 1272/2008 [CLP] and amendments	Classification Procedure
Flammable Liquids Category 3, H226	Expert judgement
Skin Corrosion/Irritation Category 2, H315	Expert judgement
Serious Eye Damage/Eye Irritation Category 2, H319	Expert judgement
Acute Toxicity (Inhalation) Category 4, H332	Expert judgement
Specific Target Organ Toxicity - Single Exposure (Respiratory Tract Irritation) Category 3, H335	Expert judgement
Specific Target Organ Toxicity - Single Exposure Category 2, H371	Expert judgement
Specific Target Organ Toxicity - Repeated Exposure Category 2, H373	Calculation method
Hazardous to the Aquatic Environment Long-Term Hazard Category 4, H413	Calculation method

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