Safety data sheet according to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758

Issue Date: 09/10/2023 Print Date: 09/10/2023 S.REACH.GB.EN

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

1.1. Product Identifier		
Product name	SULPHUR BENTONITE	
Synonyms	Not Available	
Other means of identification	S132 UFI:HG80-F00T-600G-J9F1	
Synonyms Other means of identification	Not Available S132 UFI:HG80-F00T-600G-J9F1	

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

Relevant identified uses	Fertilisers. 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	Demeter Technology Limited
Address	5 St Andrews Close, Isleham, Cambs, CB7 5TB
Telephone	+44 (0)1638 780 259
Website	demetertech.com
Email	info@demetertech.com

1.4. Emergency telephone number

Association / Organisation	NHS 111
Accountion organication	
Emergency telephone numbers	111
Other emergency telephone numbers	Not Available

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]	H315 - Skin Corrosion/Irritation Category 2
Legend:	1. Classified by Chernwatch; 2. Classification drawn from GB-CLP Regulation, UK SI 2019/720 and UK SI 2020/1567

2.2. Label elements

Hazard pictogram(s)		
	·	
Signal word	Warning	
Hazard statement(s)		
H315	Causes skin irritation.	
Supplementary statement(s)		

Not Applicable

P280	Wear protective gloves and protective clothing.
P264	Wash all exposed external body areas thoroughly after handling.

Precautionary statement(s) Response

, , ,	-
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

Not Applicable

2.3. Other hazards

- ▶ REACH Art.57-59: The mixture does not contain Substances of Very High Concern (SVHC) at the SDS print date.
- This substance is not classified as PBT or vPvB according to current EU criteria.
- No evidence of endocrine disrupting properties were found in the current literature.

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. 7704-34-9 2.231-722-6 3.016-094-00-1 4.DUIN		>90	Sulphur	Skin Corrosion/Irritation Category 2; H315 ^[1]	Not Available	Not Available
1. 1302-78-9 2.215-108-5 3.Not Available 4.Exempt (mineral)		<10	<u>bentonite</u>	Not Applicable	Not Available	Not Available
	Legend:	1. Classified by Chernwatch; 2. Classification drawn from GB-CLP Regulation, UK SI 2019/720 and UK SI 2020/1567; 3. Classification drawn from C&L * EU IOELVs available; [e] Substance identified as having endocrine disrupting properties				

SECTION 4 First aid measures

4.1. Description of first aid measures

Eye Contact	 If this product comes in contact with eyes: Wash out immediately with water. If irritation continues, 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. Do not induce vomiting. Never give anything by mouth to an unconscious person.

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

- Foam.
- Dry chemical powder.
 Water spray or fog Large fires only.
- Dry Sand

Do not use water jet as an extinguisher, as this will spread the fire.

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. Prevent, by any means available, spillage from entering drains or water courses. Use water delivered as a fine spray to control fire and cool adjacent 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	Dust may form explosive mixture with air. Combustible. Will burn if ignited. Thermal decomposition or combustion products may include the following substances: Sulphur oxides	

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	 Clean up all spills immediately. Avoid breathing dust and contact with skin and eyes. Wear protective clothing, gloves, safety glasses and dust respirator. Use dry clean up procedures and avoid generating dust. Sweep up, shovel up or Vacuum up (consider explosion-proof machines designed to be grounded during storage and use). Place spilled material in clean, dry, sealable, labelled container.
Major Spills	 Moderate hazard. CAUTION: Advise personnel in area. Alert Emergency Services and tell them location and nature of hazard. Control personal contact by wearing protective clothing. Prevent, by any means available, spillage from entering drains or water courses. Recover product wherever possible. IF DRY: Use dry clean up procedures and avoid generating dust. Collect residues and place in sealed plastic bags or other containers for disposal. IF WET: Vacuum/shovel up and place in labelled containers for disposal. ALWAYS: Wash area down with large amounts of water and prevent runoff into drains. 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

7.1. Precautions for safe handling

Safe handling	Dust may form explosive mixture with air. Avoid generation of dust. Use non sparking handtools and explosion-proof electric equipment. Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps. DO NOT enter confined spaces until atmosphere has been checked. DO NOT enter confined spaces until atmosphere has been checked. DO NOT allow material to contact humans, exposed food or food utensils. 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. 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 area protected from environmental extremes. 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. For major quantities: Consider storage in bunded areas - ensure storage areas are isolated from sources of community water (including stormwater, ground water, lakes and streams}.

7.2. Conditions for safe storage, including any incompatibilities

Suitable container	 Packing as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.
Storage incompatibility	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Exposure to moisture.

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
SULPHUR BENTONITE	Not Available	Not Available

* Values for General Population

Occupational Exposure Limits (OEL)

INGREDIENT DATA						
Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Not Available	SULPHUR BENTONITE	Not Available				

Emergency Limits

Ingredient	TEEL-1	TEEL-2		TEEL-3
SULPHUR BENTONITE	Not Available	Not Available		Not Available
Ingredient	Original IDLH		Revised IDLH	
Sulphur	Not Available		Not Available	
bentonite	Not Available		Not Available	

8.2. Exposure controls

8.2.1. Appropriate engineering controls	Provide adequate ventilation. Avoid inhalation of dust. Mechanical ventilation or local exhaust ventilation may be required. Observe any occupational exposure limits for the product or ingredients.
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. 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 protective gloves. To protect hands from chemicals, gloves should comply with European Standard EN374 (or national equivalent). Experience indicates that the following polymers are suitable as glove materials for protection against undissolved, dry solids, where abrasive particles are not present. polychloroprene. nitrile rubber. butyl rubber. fluorocaoutchouc. polyvinyl chloride. Gloves should be examined for wear and/ or degradation constantly.
Body protection	See Other protection below

Other protection	 Overalls. P.V.C apron. Barrier cream. Skin cleansing cream. Eye wash unit. Provide safety shower.

Respiratory protection

Type -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	P1 Air-line*	-	PAPR-P1 -
up to 50 x ES	Air-line**	P2	PAPR-P2
up to 100 x ES	-	P3	-
		Air-line*	-
100+ x ES	-	Air-line**	PAPR-P3

* - Negative pressure demand ** - Continuous flow

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)

 Respirators may be necessary when engineering and administrative controls do not adequately prevent exposures.
 The decision to use respiratory protection should be based on professional judgment that takes into account toxicity information, exposure measurement data, and frequency and likelihood of the worker's exposure - ensure users are not subject to high thermal loads which may result in heat stress or distress due to personal protective equipment (powered, positive flow, full face apparatus may be an option).

· Published occupational exposure limits, where they exist, will assist in determining the adequacy of the selected respiratory protection. These may be government mandated or vendor recommended.

· Certified respirators will be useful for protecting workers from inhalation of particulates when properly selected and fit tested as part of a complete respiratory protection program. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)

· Use approved positive flow mask if significant quantities of dust becomes airborne.

· Try to avoid creating dust conditions.

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	Dark Gray		
Physical state	Divided Solid Powder	Relative density (Water = 1)	1.96 - 2.07
Odour	No Odour	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	195
pH (as supplied)	Not Available	Decomposition temperature (°C)	Not Available
Melting point / freezing point (°C)	119	Viscosity (cSt)	Not Applicable
Initial boiling point and boiling range (°C)	445	Molecular weight (g/mol)	Not Available
Flash point (°C)	160	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Applicable	Surface Tension (dyn/cm or mN/m)	Not Applicable
Lower Explosive Limit (%)	Not Applicable	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 Applicable
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	Dust may form explosive mixture with air. See section 7.2
10.4. Conditions to avoid	Avoid generation of dust. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Welding and soldering products, flux products Do not subject to grinding/shock/friction Exposure to moisture. See section 7.2
10.5. Incompatible materials	Metals. Alkalis. Oxidising agents. Halogens Combustible material. Metal oxide(s). Carbides. Reducing agent. Metal Salts See section 7.2
10.6. Hazardous decomposition products	Thermal decomposition or combustion products may include the following substances: Sulphur oxides See section 5.3

SECTION 11 Toxicological information

11.1. Information on toxicological effects The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an Inhaled occupational setting. Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled. The material has NOT been classified by EC Directives or other classification systems as 'harmful by ingestion'. This is because of the lack of Ingestion corroborating animal or human evidence. This material can cause inflammation of the skin on contact in some persons. Skin Contact The material may accentuate any pre-existing dermatitis condition Although the material is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may cause transient discomfort Eye characterised by tearing or conjunctival redness (as with windburn). Slight abrasive damage may also result. Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal Chronic models); nevertheless exposure by all routes should be minimised as a matter of course. Long term exposure to high dust concentrations may cause changes in lung function i.e. pneumoconiosis. TOXICITY IRRITATION SULPHUR BENTONITE Not Available Not Available TOXICITY IRRITATION dermal (rat) LD50: >2000 mg/kg^[1] Eye: no adverse effect observed (not irritating)^[1] Sulphur Inhalation(Rat) LC50: >5.43 mg/L4h^[1] Skin: adverse effect observed (irritating)^[1] Oral (Rat) LD50: >2000 mg/kg^[1] ΤΟΧΙΟΙΤΥ IRRITATION bentonite Not Available Not Available 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS. Unless otherwise Legend: specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

×

×

Skin Irritation/Corrosion	✓	Reproductivity	×
Serious Eye Damage/Irritation	×	STOT - Single Exposure	×
Respiratory or Skin sensitisation	×	STOT - Repeated Exposure	×
Mutagenicity	×	Aspiration Hazard	×
		Legend: X – Data either not	available or does not fill the criteria for classification 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 Endpoint Test Duration (hr) Species Value Source SULPHUR BENTONITE Not Available Not Available Not Available Not Available Not Available Test Duration (hr) Species Value Endpoint Sulphur Not Available Not Available Not Available Not Available Endpoint Test Duration (hr) Species Value Source bentonite LC50 Fish 19000mg/l 96h 8 Legend: Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

12.2. Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
Sulphur	N/A - Inorganic	N/A - Inorganic

12.3. Bioaccumulative potential

Ingredient	Bioaccumulation
Sulphur	Biodegradation is not applicable as the substance is inorganic and highly insoluble in water.(LogKOW = 0.229)

12.4. Mobility in soil

Ingredient	Mobility
Sulphur	Sulfur is an inorganic substance and highly insoluble in water, it will not have any significant potential for adsorption.

12.5. Results of PBT and vPvB assessment

	P	В	т
Relevant available data	ata Not Available Not Available		Not Available
PBT	×	×	×
vPvB	X X		×
PBT Criteria fulfilled? This substance is not classifi		according to current EU/UK criteria.	
vPvB This substance is not classified as vPvB		according to current EU/UK criteria.	

12.6. Endocrine disrupting properties

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

12.7. Other adverse effects

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

SECTION 13 Disposal considerations

13.1. Waste treatment methods	
Product / Packaging disposal	Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.

	A Hierarchy of Controls seems to be common - the user should investigate:
	Tecycling Technold (if all else fails)
	This make a revolution of the second or if it has not been contaminated on as to make it unsuitable for its intended use. Shelf life
	considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or
	reuse may not aways be appropriate. In most instances the supplier of the material should be consulted.
	DO NOT allow wash water from cleaning or process equipment to enter drains.
	r It may be necessary to collect all wash water for treatment before disposal.
	In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
	Where in doubt contact the responsible authority.
	Recycle wherever possible.
	Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.
	Dispose of by: burial in a land-fill specifically licensed to accept chemical and / or pharmaceutical wastes or Incineration in a licensed
	apparatus (after admixture with suitable combustible material)
	Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.
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	Not Applicable		
14.3. Transport hazard class(es)	ClassNot ApplicableSubsidiary HazardNot Applicable			
14.4. Packing group	Not Applicable			
14.5. Environmental hazard	Not Applicable			
14.6. Special precautions for user	Hazard identification (Kemler Classification code Hazard Label Special provisions Limited quantity Tunnel Restriction Code	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable 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			
14.3. Transport hazard class(es)	ICAO/IATA Class ICAO / IATA Subsidiary Hazard ERG Code	Not Applicable Not Applicable Not Applicable		
14.4. Packing group	Not Applicable	Not Applicable		
14.5. Environmental hazard	Not Applicable	Not Applicable		
14.6. Special precautions for user	Special provisions Cargo Only Packing Instructions Cargo Only Maximum Qty / Pack Passenger and Cargo Packing Instructions Passenger and Cargo Maximum Qty / Pack Passenger and Cargo Limited Quantity Packing Instructions Passenger and Cargo Limited Maximum Qty / Pack		Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable 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

14.3. Transport hazard class(es)	IMDG Class IMDG Subsidiary Haza	Not Applicable ard Not 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	

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

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
Sulphur	Not Available
bentonite	Not Available

14.7.3. Transport in bulk in accordance with the IGC Code

Product name	Ship Type
Sulphur	Not Available
bentonite	Not Available

SECTION 15 Regulatory information

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

Sulphur is found on the following regulatory lists

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

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 (Sulphur; bentonite)
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	Yes
Japan - ENCS	No (Sulphur; bentonite)
Korea - KECI	Yes
New Zealand - NZIoC	Yes

National Inventory	Status	
Philippines - PICCS	Yes	
USA - TSCA	Yes	
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	09/10/2023
Initial Date	06/10/2023

SDS Version Summary

Version	Date of Update	Sections Updated
1.2	06/10/2023	Composition / information on ingredients - Ingredients

Other information

The following information is provided to conform with article 13 of the EC Directive on Packaging and Packaging Waste 94/62/EC:- Wherever possible we use returnable packaging and pallets. Details of these are on our sales contracts.- For any non-returnable packaging the cost of disposal is at your expense, but we do have a list of reprocessers available.- In most cases, but not all, we are able to supply products in returnable packaging but the additional cost of this will be for the customer's expense. Please ask for details with your specific requirements.- Any product supplied in returnable packaging is clearly marked to this effect.

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

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** 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]

regulation (EC) No 1272/2008 [CLP] and amendments	Classification Procedure
Skin Corrosion/Irritation Category 2, H315	Calculation method

Key literature references and sources for data European Chemicals Agency, http://echa.europa.eu

GESTIS Substance database; www.dguv.de/ifa/gestis-database. Manufacturer's Safety Data Sheet Powered by AuthorITe, from Chemwatch.