

Revision: 1.2

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Section 1. Identification

1.1 Product Identifier 1411

Product Name	SODIUM DITHIONITE pure
CAS Number	7775-14-6
REACH Registration No	A registration number is not available as the substance or its uses are exempt, the annual tonnage does not require a registration or the registration is envisaged for a later date.
Molecular Formula	$\text{Na}_2\text{S}_2\text{O}_4$ =174.10

1.2 Relevant identified uses of the substance or mixture & uses advised against

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

1.3 Supplier Vickers Laboratories Ltd



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Section 2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to regulation 1272/2008/EC

Self heating, category 1
Acute toxicity, category 4 (oral)

H251: Self-heating; may catch fire.
H302: Harmful if swallowed.

2.2 Label elements

Labelling according to regulation 1272/2008/EC

Signal word Danger

Hazard Pictograms



Hazard Statements	Self-heating; may catch fire. Harmful if swallowed.
Precautionary Statements	Keep cool. Protect from sunlight. Wear protective gloves / protective clothing / eye protection. Store away from other materials.
Supplemental Hazard Information (EU)	Contact with acids liberates toxic gas.

Section 3. Composition

3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Sodium dithionite	7775-14-6	231-890-0		87%	Self-heat. 1, Acute Tox. 4 (O)
Sodium carbonate	497-19-8	207-838-8		13%	Eye Irrit. 2

Section 4. First Aid

4.1 Description of first aid measures

Eyes	Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. If discomfort persists OBTAIN MEDICAL ATTENTION.
Skin	Wash off skin thoroughly with water. If discomfort persists OBTAIN MEDICAL ATTENTION.
Inhalation	Remove from exposure. If exposure to toxic fumes has occurred OBTAIN IMMEDIATE MEDICAL ATTENTION.
Ingestion	If conscious wash out mouth thoroughly with water and give water or milk to drink. Do not induce vomiting. OBTAIN MEDICAL ATTENTION URGENTLY.
Personal protection for first aiders	Wear protective gloves / eye protection.

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

No further relevant information available.

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

No further relevant information available.

Section 5. Fire Fighting

5.1 Extinguishing media

Extinguishing Media	Dry powder fire extinguisher.
Unsuitable Media	Water.

5.2 Special hazards arising from the substance or mixture

Hazards	May evolve toxic fumes if involved in a fire.
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5.3 Advice for firefighters

Advice for firefighters	Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus.
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Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection	Avoid breathing dust-wear respiratory protective equipment. Ensure no contact with water, acids or other aqueous solutions is possible. However if contact with acid is possible, use full protective clothing and breathing apparatus.
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6.2 Environmental precautions

Environmental	Presents no major environmental hazard.
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6.3 Methods and material for containment and cleaning up

Major Spillage Shovel/sweep up into container for removal Wash area down with copious amounts of water.
Minor Spillage Wash area down with copious amounts of water.

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breath dust. Do not allow to contaminate clothing.
Ensure Local Exhaust Ventilation maintains dust concentrations to a minimum.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage . Protect against moisture to prevent decomposition and corrosion.

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits			
			Long Term (8hr TWA)		Short Term 15min period	
Sodium dithionite	7775-14-6	87%	-	-	-	-
Sodium carbonate	497-19-8	13%	-	-	-	-

Exposure data source(s) No occupational exposure data currently available.

8.2 Exposure controls

Respiratory Protection If process creates significant amounts of dust use L.E.V. or wear suitable dust mask.
Hand Protection Wear gloves.
Eye Protection Use tightly fitting chemical splash proof glasses or goggles.
Skin Protection Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.
Special Hazards No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance White free flowing granular material.
Odour Organic sulphur odour.
pH 6 @ 20°C 1%
Boiling Point Not available
Melting Point 52 °C (Decomposition)
Flash Point Not applicable
Upper Flammable Limit Not applicable
Lower Flammable Limit Not applicable
Auto Ignition Not applicable
Explosive Properties No.
Oxidising Properties No.
Vapour Pressure Not applicable
Relative Density 2.380
Water Solubility 241 g/L

9.2 Other information

No data available.

Section 10. Stability & Reactivity

10.1	Reactivity	No data available.
10.2	Chemical Stability	Stable under normal conditions
10.3	Possibility of hazardous reactions	No data available.
10.4	Conditions to Avoid	Decomposes on exposure to moist air or water and at temperatures above 60C
10.5	Incompatible Materials	Reacts with acids liberating very toxic fumes of sulphur dioxide. Strong oxidising agents. Combustible materials.
10.6	Hazardous Decomposition Products	Toxic fumes of sulphur dioxide.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	Contact with the solid or dust may be irritating to the eyes.
Skin	Contact with the solid or dust may be irritating to the skin.
LD50 Skin	>2000 mg/Kg Rat
Ingestion	Harmful if swallowed. Ingestion may result in formation of toxic sulphur dioxide.
LD50 Oral	2500 mg/Kg Rat
Inhalation	Inhalation of dust will produce irritation of the eyes, nose, throat and respiratory tract. Major hazard is through inhalation of sulphur dioxide fumes which produce a hard uncontrollable cough. Excessive exposure can lead to unconsciousness and may prove fatal.
LD50 Inhalation	>5.5 mg/L Rat
TCLo	Not available
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	None identified.

Section 12. Ecological

12.1	Toxicity	COD=210mg/l O ₂ /g; Aquatic toxicity 96hr- EC50 Bacteria 87mg/l; LC50 Fish (Leuciscus idus) 46-68mg/l Daphnia magna 48hr EC50 = 98mg/l , 24hr = 120mg/l.
	LC50 Algal	206.2 mg/L Algae
	LC50 Crustacea	98.3 mg/L Daphnia
	LC50 Fish	62.3 mg/L Ide (leuciscus idus)
12.2	Persistence and degradability	No data available.
12.3	Bioaccumulative potential	No data available.
12.4	Mobility in soil	No data available.
12.5	Results of PBT & vPvB assessment	Assessment not required.
12.6	Other adverse effects	None known at present.

Section 13. Disposal Considerations

13.1 Waste treatment methods

Disposal Methods	Dispose of via an authorised waste disposal contractor to an approved waste disposal site, observing all local and national regulations.
Contaminated Packaging	Wash out containers with water.

Section 14. Transport Information

14.1 UN Number	1384
14.2 Proper Shipping Name	Sodium dithionite
14.3 Transport classes	
UN classification	4.2
Subsidiary hazard(s)	None
Transport category	2
ADR Hazard ID	40
Tunnel Restriction Code	D/E
14.4 Packing Group	II
14.5 Environment hazards	See section 12.
14.6 Special precautions for user	No special precautions required.
14.7 Transport in bulk	Not transported in bulk.



Section 15. Regulatory Information

15.1 Safety, health and environment regulations specific for substance/mixture.

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification Self heating, category 1; Acute toxicity, category 4 (oral)

Signal word Danger

Hazard Pictograms



Hazard Statements H251, H302
Self-heating; may catch fire. Harmful if swallowed.

Precautionary Statements P235+P410, P280, P420
Keep cool. Protect from sunlight. Wear protective gloves / protective clothing / eye protection. Store away from other materials.

Supplemental Hazard Information (EU) EUH031
Contact with acids liberates toxic gas.

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

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