

Part of Thermo Fisher Scientific

SAFETY DATA SHEET

Creation Date 10-Feb-2011 Revision Date 21-Oct-2014 Revision Number 1

1. Identification

Product Name Sodium sulfate decahydrate

Cat No.: \$414-12; \$414-212; \$414-250LB; \$414-500

Synonyms Glauber's salt

Recommended Use Laboratory chemicals.

Uses advised against No Information available

Details of the supplier of the safety data sheet

Company Emergency Telephone Number

Fisher Scientific CHEMTREC®, Inside the USA: 800-424-9300 One Reagent Lane CHEMTREC®, Outside the USA: 001-703-527-3887

Fair Lawn, NJ 07410 Tel: (201) 796-7100

2. Hazard(s) identification

Classification

Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Based on available data, the classification criteria are not met

Label Elements

None required

Hazards not otherwise classified (HNOC)

None identified

3. Composition / information on ingredients

Component	CAS-No	Weight %
Sodium sulfate decahydrate	7727-73-3	>95
Sodium sulfate	7757-82-6	-

4. First-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Obtain medical attention.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Get medical attention

immediately if symptoms occur.

Inhalation Move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if

symptoms occur.

Ingestion Do not induce vomiting. Obtain medical attention.

Most important symptoms/effects No information available.

Notes to Physician No information available.

Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing MediaSubstance is nonflammable; use agent most appropriate to extinguish surrounding fire.

Unsuitable Extinguishing Media No information available

Flash Point No information available Method - No information available

Autoignition Temperature

Explosion Limits

No information available

Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Sulfur oxides Sodium oxides

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health	Flammability	Instability	Physical hazards
1	0	0	N/A

Accidental release measures

Personal Precautions
Use personal protective equipment. Ensure adequate ventilation. Avoid dust formation.

Environmental Precautions
See Section 12 for additional ecological information.

Methodo for Containment and Clean Sugan up or vacuum up onlines and collect in quitable container for di

Methods for Containment and Clean Sweep up or vacuum up spillage and collect in suitable container for disposal. Do not let **Up** this chemical enter the environment. Avoid dust formation.

	7. Handling and storage
Handling	Ensure adequate ventilation. Wear personal protective equipment. Do not breathe dust. Do not ingest. Avoid dust formation.

Storage Keep in a dry, cool and well-ventilated place. Keep container tightly closed.

8. Exposure controls / personal protection

Exposure Guidelines

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering Measures Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations

and safety showers are close to the workstation location.

Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard

> EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Handle in accordance with good industrial hygiene and safety practice. **Hygiene Measures**

Physical and chemical properties

Physical State Solid White **Appearance** Odorless Odor

Odor Threshold No information available 5.2-9.2 5% solution pН **Melting Point/Range** 884 °C / 1623.2 °F

No information available **Boiling Point/Range** Flash Point No information available No information available **Evaporation Rate** Flammability (solid,gas) No information available

Flammability or explosive limits

Upper No data available Lower No data available No information available **Vapor Pressure Vapor Density** No information available 1.46

Relative Density

No information available Solubility Partition coefficient; n-octanol/water No data available

Autoignition Temperature No information available **Decomposition Temperature** No information available

Viscosity No information available **Molecular Formula** Na2 O4 S . 10 H2 O

Molecular Weight 322.2

10. Stability and reactivity

None known, based on information available **Reactive Hazard**

Stability Stable under normal conditions.

Conditions to Avoid Incompatible products. **Incompatible Materials** Strong oxidizing agents

Hazardous Decomposition Products Sulfur oxides, Sodium oxides

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

No acute toxicity information is available for this product **Product Information**

Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg. Oral LD50 Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg. **Dermal LD50** Based on ATE data, the classification criteria are not met. ATE > 5 mg/l. Mist LC50

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	
Sodium sulfate	10000 mg/kg (Rat)	Not listed	Not listed	

Toxicologically Synergistic

No information available

Products

Delayed and immediate effects as well as chronic effects from short and long-term exposure

No information available Irritation

Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Sodium sulfate decahydrate	7727-73-3	Not listed				
Sodium sulfate	7757-82-6	Not listed				

Mutagenic Effects No information available

No information available. **Reproductive Effects**

Developmental Effects No information available.

No information available. **Teratogenicity**

STOT - single exposure None known STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects,both acute and No information available

delayed

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity

Do not empty into drains.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Sodium sulfate	-	Pimephales promelas: LC50:	-	EC50: 4547 mg/L/96h
		13.5 - 14.5 g/L/96h		EC50: 2564 mg/L/48h
				EC50: 4547 mg/L/96h

Persistence and Degradability No information available **Bioaccumulation/ Accumulation** No information available.

Mobility No information available.

Component	log Pow
Sodium sulfate	-3

13. Disposal considerations

Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

4 4 7			
14.	Fransport	information	

DOTNot regulatedTDGNot regulatedIATANot regulatedIMDG/IMONot regulated

15. Regulatory information

International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Sodium sulfate decahydrate	-	-	-	-	-		Х	-	Χ	Х	-
Sodium sulfate	Χ	Х	-	231-820-9	-		Х	Х	Х	Х	Х

Legend:

- X Listed
- E Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
- F Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
- N Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
- P Indicates a commenced PMN substance
- R Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
- S Indicates a substance that is identified in a proposed or final Significant New Use Rule
- T Indicates a substance that is the subject of a Section 4 test rule under TSCA.
- XU Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).
- Y1 Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
- Y2 Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313 Not applicable

SARA 311/312 Hazardous Categorization

Acute Health Hazard
Chronic Health Hazard
No
Fire Hazard
No
Sudden Release of Pressure Hazard
No
Reactive Hazard
No

Clean Water Act Not applicable

Clean Air Act Not applicable

OSHA Occupational Safety and Health Administration

Not applicable

CERCLA

Not applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals

State Right-to-Know

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island

Sodium sulfate	X	-	X	-	-

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

WHMIS Hazard Class Non-controlled

16. Other information	
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Prepared By Regulatory Affairs

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Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard

replacing the current legislation under 29 CFR 1910.1200 to align with the Globally

Harmonized System of Classification and Labeling of Chemicals (GHS)

Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of SDS