CHEMICALS*

SAFETY DATA SHEET

1. Identification

Product identifier SODIUM SULFATE, ANHYDROUS, POWDER, REAGENT (ACS)

Other means of identification

Product code 2454 CAS number 7757-82-6

Recommended use professional, scientific and technical activities: other professional, scientific and technical activities

Chemtrec 800-424-9300

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company nameGFS Chemicals, Inc.Address800 Kaderly DriveColumbus, OH 43228

United States

Telephone Phone 740-881-5501 Toll Free 800-858-9682

Fax 740-881-5989

Website www.gfschemicals.com
E-mail service@gfschemicals.com

Emergency phone Emergency Assistance

number

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

Environmental hazards Not classified.

OSHA defined hazards Not classified.

No hazards resulting from the material as supplied.

Label elements

Hazard symbol None.
Signal word None.

Hazard statement The substance does not meet the criteria for classification.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Wash hands after handling.

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information None.

3. Composition/information on ingredients

Substances

Chemical name	Common name and synonyms	CAS number	%
SODIUM SULFATE		7757-82-6	100

^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Rinse skin with water/shower.

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Eye contact Do not rub eyes. Flush eyes with water as a precaution. Get medical attention if irritation develops

and persists.

Ingestion Have victim rinse mouth thoroughly with water.

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Most important

symptoms/effects, acute and

delayed

Dusts may irritate the respiratory tract, skin and eyes.

Indication of immediate medical attention and special

treatment needed

Treat symptomatically.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to

protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

Use extinguishing agent suitable for type of surrounding fire. Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from

the chemical

None known.

containers.

Special 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.

Fire fighting equipment/instructions

Specific methods General fire hazards Use standard firefighting procedures and consider the hazards of other involved materials.

Move containers from fire area if you can do it without risk. Use water spray to cool unopened

No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Methods and materials for containment and cleaning up

Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. For personal protection, see section 8 of the SDS.

Avoid the generation of dusts during clean-up. If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. Collect dust using a vacuum cleaner equipped with HEPA filter. Sweep up or gather material and place in appropriate container for disposal. This product is miscible in water. Should not be released into the environment. Collect dust or particulates using a vacuum cleaner with a HEPA filter. Stop the flow of material, if this is without risk.

Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Following product recovery, flush area with water.

Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal.

For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Minimize dust generation and accumulation. Provide appropriate exhaust ventilation at places where dust is formed. Practice good housekeeping.

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

This substance has no PEL, TLV, or other recommended exposure limit.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits. Keep formation of

airborne dusts to a minimum.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other Wear suitable protective clothing.

Respiratory protection Under normal conditions, respirator is not normally required. Use a NIOSH/MSHA approved

respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

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General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Solid.
Form Powder.
Color White.

Odor Odorless.

Odor threshold Not available.

Physical state Solid.
Powder.
Odorless.

Odorless.

Not available.

Melting point/freezing point 1630.4 °F (888 °C)

Initial boiling point and

boiling range

Not available.

Flack and a

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

Flammability limit -

upper (%)

Not available.

Explosive limit - lower

(%)

Not available.

Explosive limit - upper

(%)

Not available.

Vapor pressureNot available.Vapor densityNot available.Relative densityNot available.

Solubility(ies)

Solubility (water) Soluble

Partition coefficient (n-octanol/water)

Not available.

Auto-ignition temperatureNot available.Decomposition temperatureNot available.ViscosityNot available.

Other information

Density 2.67 g/cm3 estimated

Explosive propertiesNot explosive.Molecular formulaNa2SO4Molecular weight142.06 g/molOxidizing propertiesNot oxidizing.

pH in aqueous solution 5.2 - 9.2 (5% solution)

Specific gravity 2.67

10. Stability and reactivity

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

Chemical stabilityMaterial is stable under normal conditions. **Possibility of hazardous**Hazardous polymerization does not occur.

reactions

Conditions to avoid None known. **Incompatible materials** None known.

Hazardous decomposition

products

No hazardous decomposition products are known.

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11. Toxicological information

Information on likely routes of exposure

Inhalation Dust may irritate respiratory system. Skin contact Dust or powder may irritate the skin.

Eye contact Dust may irritate the eyes.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics Dusts may irritate the respiratory tract, skin and eyes.

Information on toxicological effects

Acute toxicity Not known.

Product Species Test Results

SODIUM SULFATE (CAS 7757-82-6)

Acute Oral

LD50 Rat 5989 mg/kg

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye

Irritating to eyes.

irritation

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity

- single exposure

Not classified.

Specific target organ toxicity

- repeated exposure

Not classified.

Aspiration hazard Not an aspiration hazard.

12. Ecological information

The product is not classified as environmentally hazardous. However, this does not exclude the **Ecotoxicity**

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Product		Species	Test Results
SODIUM SULFATE (CA	AS 7757-82-6)		
Aquatic			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	2807 - 3535 mg/l, 48 hours
Fish	LC50	Striped bass (Morone saxatilis)	790 mg/l, 96 hours

^{*} Estimates for product may be based on additional component data not shown.

Persistence and degradability None known. **Bioaccumulative potential** No data available. Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

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^{*} Estimates for product may be based on additional component data not shown.

13. Disposal considerations

Disposal instructionsCollect and reclaim or dispose in sealed containers at licensed waste disposal site. Can be landfilled

when in compliance with local regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste codeThe waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal

instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

15. Regulatory information

US federal regulations This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazarc

Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No

Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 No

Hazardous chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

(SDWA)

Not regulated.

Food and Drug

Administration (FDA)

Total food additive
Indirect food additive

GRAS food additive

US state regulationsCalifornia Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is

not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

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International Inventories

Country(s) or region	Inventory name On inventory (ye	s/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Toxic Chemical Substances (TCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes
*A \/ :d:++ + -		

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue dateMay-15-2013Revision dateApril-06-2018

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Disclaimer The information given is designed only as a guidance for safe handling, use, processing, storage,

transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text. GFS Chemicals, Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in

the sheet was written based on the best knowledge and experience currently available.

Revision information This document has undergone significant changes and should be reviewed in its entirety.

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