# **Technical Specification**

#### Sodium Sulfate

**Chemical name:** sodium sulfate anhydrous / sodium sulphate

**Appearance**: white monoclinic crystal or powder.

**General characteristic**: Sodium Sulfate with white monoclinic crystal or powder, Density: 2.68 Melting point: 884°C Solubility: Soluble in water and glycerin, insolubled in

ethanol.

Molecular formula: Na<sub>2</sub>SO<sub>4</sub>

Molecular weight: 142.04

**Chemical Structural:** 

0.5S 50 Na

Quality specification:

danty specification.				
<u>Items</u>	<u>Specification</u>			
Appearance	white monoclinic crystal or powder			
Content(Na2SO4)) %	99.0MIN			
chloride(Cl <sup>-</sup> ) %	0.05 MAX			
Ca <sup>2+</sup> +Mg <sup>+</sup> content %	0.05MAX			
Iron(Fe <sup>3+</sup> ) %	0.005 MAX			
Moisture %	0.02MAX			
Water insolubles %	0.01 MAX			
Whiteness %	90MIN			
Hardness ppm	30MAX			

**Application**: Can be used as an salting agent or flocculating agent in medicine, and can be used in paper, glass, printing and dyeing, synthetic fiber, leather industry as well.

Packing: in net25kg, 50kg, 1000kg woven bags, with inner transparent plastic bags

**Storage**: Stored in a cool, ventilated warehouse. Away from fire and heat. Acids, etc. should

be kept separately, avoid mixed reserve.

# <u>Hubei Zhenhua Chemical Co., Ltd</u>

#### 产品化验证明书 ANALYSIS CERTIFICATE

产品名称: 元明粉

报告日期: 2023-09-01

Name of Product: SODIUM SULPHATE ANHYDROUS 99%

Date of Reporting: 2023-09-01

PH:6-8

# 质量规格

### **Quality Specification**

序号	指 标 名 称 Name of Item	规 定 指 标 Item of Provision	检验结果 Result of Examination	
1	SODIUM SULFATE %≥	99	99.25	
2	WATER-INCOMPATIBLE SOLUTION(%)	0.05MAX	0.0032	
3	CALCLUM MAGNESIUM(%)	0.05MAX	0.027	
4	CHLORIDE(CL)%	0.05MAX	0.045	
5	IRON(FE)%≤	0.005MAX	0.0002	
6	MOISTURE CONTENT(%)	0.02MAX	0.004	
7	WHITENESS	88MIN	90	
8	РН	6-8	7	
9	备注 Remarks	合格品 Qualified Product		

DATE OF MANUFACTURE: SEP. 1,2023

DATE OF EXPIRY: SEP. 1,2025

LOT NO.:SA202309

#### **MSDS**

#### Section 1 - Chemical Product and Company Identification

MSDS Name: Sodium sulfate anhydrous

Synonyms: Bisodium sulfate; Dibasic sodium sulfate; Disodium

monosulfate; Disodium sulfate; Sodium sulphate; Sulfuric acid, disodium

salt.

Manufacturer: Hubei ZhenHua Chemical Co., LTD

Address: No.:668, Huangshi Road Xisaishan District, Huangshi City, Hubei Province China

Postal code: 435001

Emergency Tel: 0086-714-6406341

#### Section 2 - Composition, Information on Ingredients

CAS# Chemical Name Percent EINECS/ELINCS 7757-82-6 Sodium sulfate 99 231-820-9

#### Section 3 - Hazards Identification

#### **EMERGENCY OVERVIEW**

Appearance: white powder.

Caution! May cause eye, skin, and respiratory tract irritation. Hygroscopic (absorbs moisture from the air). The toxicological properties of this material

have not been fully investigated. Target Organs: No data found.

#### Potential Health Effects

Eye: May cause eye irritation. Causes redness and pain.

Skin: May cause skin irritation. May cause an allergic reaction in certain

individuals.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and

diarrhea. May be harmful if swallowed.

Inhalation: May cause respiratory tract irritation. May be harmful if inhaled.

Chronic: No information found.

#### Section 4 - First Aid Measures

Eyes: In case of contact, immediately flush eyes with plenty of water for a t

least 15 minutes. Get medical aid.

Skin: In case of contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid if irritation develops and persists. Wash clothing before reuse.

Ingestion: If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

Get medical aid.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid. Notes to Physician: Treat symptomatically and supportively.

#### Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Substance is noncombustible.

Extinguishing Media: Use extinguishing media most appropriate for the

surrounding fire.

Flash Point: Not applicable.

Autoignition Temperature: Not available. Explosion Limits, Lower:Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 1; Flammability: 0; Instability: 1

#### Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

#### Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Storage: Store in a cool, dry place. Store protected from moisture.

#### Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

**Exposure Limits** 

Chemical Name	ACGIH	NIOSH	OSHA -Final PELs
Sodium sulfate	none listed	none listed	none listed

OSHA Vacated PELs: Sodium sulfate: No OSHA Vacated PELs are listed for

this chemical.

Personal Protective Equipment

Eyes: 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 EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to minimize contact with

skin.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must

be followed whenever workplace conditions warrant respirator use.

#### Section 9 - Physical and Chemical Properties

Physical State: Powder Appearance: white Odor: odorless pH: 6-8 (5% solution)

Vapor Pressure: Not available. Vapor Density: Not available.

Evaporation Rate:Not available.

Viscosity: Not available. Boiling Point: 1700 deg C

Freezing/ Melting Point:880 - 888 deg C Decomposition Temperature:Not available.

Solubility: Soluble.

Specific Gravity/Density: 2.68 g/cm3

Molecular Formula: Na2SO4 Molecular Weight: 142.04

Section 10 - Stability and Reactivity

Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions. Hygroscopic: absorbs moisture or

water from the air.

Conditions to Avoid: Dust generation, moisture, excess heat.

Incompatibilities with Other Materials: Strong oxidizing agents, strong

acids, aluminum, magnesium.

Hazardous Decomposition Products: Oxides of sulfur, sodium oxide.

Hazardous Polymerization: Will not occur.

#### Section 11 - Toxicological Information

RTECS#:

CAS# 7757-82-6: WE1650000

LD50/LC50:

CAS# 7757-82-6:

Oral, mouse: LD50 = 5989 mg/kg;

Carcinogenicity:

CAS# 7757-82-6: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No data available.

Teratogenicity: Oral, mouse: TDLo = 14 gm/kg (female 8-12 day(s) after conception) Effects on Newborn - other neonatal measures or effects.; Parenteral, mouse: TDLo = 60 mg/kg (female 8 day(s) after conception) Effects on Embryo or Fetus - fetotoxicity (except death, e.g., stunted fetus) and Specific Developmental Abnormalities - musculoskeletal system.

Reproductive Effects: No information found

Mutagenicity: Mutagenic effects have occurred in experimental animals.

Neurotoxicity: No information found

Other Studies:

#### Section 12 - Ecological Information

Ecotoxicity: Fish: Bluegill/Sunfish: LC50 = 12,750 ppm; 96 Hr; Static bioassayWater flea Daphnia: LC50 = 4547 mg/L; 96 Hr; UnspecifiedFish: Fathead Minnow: LC50 = 13,500-14,000 mg/L; 24 - 96 Hr; UnspecifiedFish: Mosquito Fish: LC50 = 17,500 mg/L; 96 Hr; Unspecified This chemical is not expected to cause oxygen depletion in aquatic systems. It has a low potential to affect aquatic organisms and is expected to have a low potential to affect secondary waste treatment microorganisms.

Environmental: Sodium sulfate may persist indefinitely in the environment, but is not likely to show bioaccumulation or food chain contamination effects. If diluted with water, this chemical released directly or indirectly into the environment is not expected to have a significant impact.

Physical: No information available.

Other: This chemical is not likely to bioconcentrate.

#### Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed. RCRA U-Series: None listed.

#### Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	Not regulated	Not Regulated
Hazard Class:	Not regulated	Not regulated
UN Number:	Not regulated	Not regulated
Packing Group:	Not regulated	Not regulated

#### Section 15 - Regulatory Information

**US FEDERAL** 

**TSCA** 

CAS# 7757-82-6 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

**Chemical Test Rules** 

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

Section 313 No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by

OSHA.

STATE

CAS# 7757-82-6 can be found on the following state right to know lists:

Pennsylvania, Massachusetts.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols:

Not available.

Risk Phrases:

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)

CAS# 7757-82-6:0

Canada - DSL/NDSL

CAS# 7757-82-6 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of Not controlled..

This product has been classified in accordance with the hazard criteria of the

Controlled Products Regulations and the MSDS contains all of the

information required by those regulations.

Canadian Ingredient Disclosure List

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way

shall be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if has been advised of the possibility of such damages

Section 16 – OTHER INFORMATION
Issued by Hubei ZhenHua Chemical Co., LTD





# ZHENHUA CHEMICAL MINISULPHATE ANNUM NOTICE AND THE STREET STRE

(元明粉)

PURITY≥99%

PH 6-8

N.W.:50KGS

G.W.:50.1KGS

MADE IN CHINA ISO9001 CERTIFICATE

HUBEIZHENHUA CHEMICAL CO., LTD

ADD.: HUANGSHI CHINA WWW.HBZHENHUA.COM Lenzing

innovative by nature

**兰精™无水硫酸钠** 

LENZING M sodium Sulphate

purity indication: min. 99.5 % net weight: 50 kg

20 年 月 日 班

Lenzing (Nanjing) Fibers Co., Ltd



GB/T 6009-2014 made in China



KEEP DRY

USE NO HOOKS

adlum Sulphate

P21

# Sateri Anhydrous Sodium Sulfate

硫酸钠 (Na,SO,) 含量>99%

Sodium Sulfate Content

净 重: 50kg

N W:

生产日期:

Product date:

生产厂: 赛得利 (江苏) 纤维有限公司

Factory: Sateri(Jiangsu)ChemicalFibre Co., Ltd

中国 制造 MADE IN CHINA Lenzing

Innovative by nature

LENZING™ Sodium Sulphate

purity indication: min. 99,5%

net weight: 25 kg

HNOLOGIES (PVT)

Pt. South Pacific Viscose made in Indonesia





KERR DRY