



8210 N. Austin Avenue, Morton Grove, IL 60053-0519, U.S.A.
 847-967-6000 800-323-8144
 (Monday - Friday: 7:30 a.m. - 4:00 p.m. CST)

Emergency Contact:
 INFOTRAC 800-535-5053 [U.S.A.]

Name: 1-Pentanesulfonate, sodium salt
 Code: 403025, 403055, 403125, 403225, 403325, 403425

..... **MATERIAL SAFETY DATA SHEET**

SECTION 1 PRODUCT IDENTIFICATION

Name: 1-Pentanesulfonate, sodium salt
 Code: 403025, 403055, 403125, 403225, 403325, 403425

SECTION 2 COMPOSITION, INFORMATION ON INGREDIENTS.....

Synonyms

Pentane sulfonic acid, sodium salt

CAS #: 22767-49-3

MF: C₅H₁₁NaO₃S or CH₃(CH₂)₄SO₃•Na

Ingredients

Concentration (%/wt)

1-Pentanesulfonate, sodium salt (22767-49-3) NLT 98 %

Manufacturing impurities < 2 %

SECTION 3 HAZARDS IDENTIFICATION

Precautionary Statements

See Sections 8 and 11 for further details.

The properties of this material have not been fully investigated. Use due caution in handling and use of this material.

..... **Emergency Overview**

NFPA Ratings (Scale 0-4); Health = 1; Fire = 1; Reactivity = 0;

Solid: White crystalline powder

May be irritating to skin, eyes, mucous membranes, and upper respiratory tract. May be harmful if ingested.

The properties of this material have not been fully investigated. Use due caution in handling and use of this material.

May emit toxic fumes under fire conditions--potential chemical or thermal decomposition products: carbon monoxide, carbon dioxide, sulfur oxides

Standard chemical handling precautions: Avoid ingestion or breathing dust. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.

Target organs: Undetermined

See Sections 4, 5, 6, 8, 9, and 10.

Other Hazard Information

This compound has not fully been tested for toxicological, irritation, or similar tendencies.

Primary Route(s) of Entry: Ingestion, Eye or Skin contact, Dust inhalation

Eye: May be irritating.

Skin: May be irritating. Prolonged exposure may cause dermatitis.

Inhalation: May be irritating to mucous membranes and upper respiratory system. May be harmful.

Ingestion: May be harmful. May cause gastrointestinal irritation, nausea, and vomiting.

Acute: No exposure limit has been established and limited toxicological information is available.

Chronic: May cause irritation. May be harmful.

Target Organs: Undetermined

Symptoms: See above route. Pre-existing conditions which may be aggravated: not determined.

See Section 11 for additional toxicological data.



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SECTION 4 FIRST AID MEASURES.....

Eye contact: Immediately flush eyes with copious amounts of water or eyewash solution for at least 15 minutes; lift eyelids occasionally. If irritation persists, consult physician.
 Skin contact: Immediately remove contaminated clothing and shoes, then wash skin with soap and copious amounts of water. If irritation persists, consult physician.
 Inhalation: Remove to fresh air. If not breathing, give artificial respiration and keep person warm and at rest. If breathing is difficult, give oxygen; consult physician.
 Ingestion: Wash out mouth with water provided person is conscious; consult physician.
Wash contaminated clothing before reuse.
 Physician note: Symptomatic and supportive care. No specific antidote. Treatment based on physician judgment in response to reactions of the patient.

SECTION 5 FIRE FIGHTING MEASURES

Flash Point:	NA	Method:	NA	Autoignition:	NE
OSHA Flammability Class:	NA	Explosion Limits:	upper:	NE	
NFPA:	See Section 3 Hazards Identification	Emergency Overview	lower:	NE	

Extinguishing Media

Water spray, carbon dioxide, dry chemical powder, or appropriate foam.

Special or Standard Fire Fighting Procedures

Standard precautions for fighting large fires involving chemicals: Wear self-contained breathing apparatus (SCBA) and protective clothing to prevent contact with skin and eyes.

Standard Fire and Explosion Hazards

Slight fire hazard--As with most organic compounds, fire is possible at elevated temperatures or from contact with an ignition source.

Explosion potential unknown--If a substance is an organic solid, fine dust dispersed in air in sufficient concentrations in the presence of an ignition source is a potential for a dust explosion.

Avoid inhalation of material or combustion by-products.

Unusual Fire and Explosion Hazards

None

Hazardous Combustion or Decomposition Products

May emit carbon monoxide, carbon dioxide, sulfur oxides

SECTION 6 ACCIDENTAL RELEASE MEASURES.....

Water Release

Standard chemical precautions: Keep out of water supplies and sewers.

Occupational Release

Eliminate all ignition sources/slight fire hazard.

Evacuate unnecessary people from area. Isolate spilled material.

Ventilate area.

Wear protective clothing to prevent contact with skin and eyes (lab coat, gloves, safety glasses).

Wear NIOSH/MSHA approved respirator for dust to prevent potential inhalation irritation.

If in solution, mix with sand or similar adsorbent material.

Sweep up, seal in appropriate hazardous waste container, and hold for proper waste disposal.

Avoid raising dust as it is a powdered material.

Wash spill site after material pickup is complete.

Standard chemical precautions: Keep out of water supplies and sewers.

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SECTION 7 HANDLING AND STORAGE.....

General Handling Measures

See Section 8 Below.

General Storage Measures

Store in a cool, dry place with adequate ventilation.

Minimize dust.

Avoid ignition and heat sources.

Special Storage Instructions

None

Special Handling Instructions

None

SECTION 8 EXPOSURE CONTROLS, PERSONAL PROTECTION

Airborne Exposure Limits

		TWA (8H)		STEL		Ceiling Limit		Ceiling (skin)	
		ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³
1-Pentanesulfonate, sodium salt 22767-49-3	OSHA PEL/VPEL	NE	NE	NE	NE	NE	NE	NE	NE
	ACGIH - TLV	NE	NE	NE	NE	NE	NE	NE	NE

NE = Not established;

Special/Other Control Measures

Odor threshold: NA

Personal Protective Equipment (PPE)

Chemical safety eyewear

Compatible chemical-resistant gloves

NIOSH/MSHA approved respirator with appropriate protections to prevent dust inhalation.

Protective Clothing (e.g., lab coat)

Other Standard Safety Equipment and Engineering Preventive Measures

Safety shower and eye wash

Mechanical exhaust

General Precautions and Handling Measures

Avoid ingestion, inhalation and contact with eyes, skin, and clothing.

Avoid prolonged or repeated exposure. Wash thoroughly after handling.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Chemical Family: Alkyl sodium sulfonates

Use: Ion Pairing Reagent

Appearance, Odor, and Other Properties

Appearance: White crystalline powder

Odor: none

MP: >300°C (>572°F)

FW: 192.2

bp: NA

Solubility in Water: Moderate

pH: NE

VP (mmHg): NA

Vapor Density: NA

Water Reactive: no

% Volatiles: NE

Specific Gravity (H₂O = 1.0): NE

Evap. Rate: NA

Refractive Index: NA

Viscosity: NA

Octanol/Water (K_{ow}): NE

Solubility in Organic Solvents: NE

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SECTION 10 STABILITY AND REACTIVITY

Stability

Stable.

Incompatibilities

Strong Oxidizers
 Strong Acids

Precautions

Avoid incompatibilities. Avoid generating dust. Keep out of water supplies and sewers.

Hazardous Combustion or Decomposition Products

May emit carbon monoxide, carbon dioxide, sulfur oxides

Hazardous Polymerization

None

SECTION 11 TOXICOLOGICAL INFORMATION

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

RTECS #

CAS #

Not Assigned	1-Pentanesulfonate, sodium salt	22767-49-3
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Only selected Registry of Toxic Effects of Chemical Substances data (RTECS) is presented here. See actual entry in RTECS for complete information.

Irritation Data

	eye	skin
1-Pentanesulfonate, sodium salt	NDA	NDA

Toxicity Data

	oral	inhalation	dermal or other
1-Pentanesulfonate, sodium salt	NDA	NDA	NDA

Carcinogenicity

	OSHA	IARC	NTP	ACGIH	NIOSH	Notes
1-Pentanesulfonate, sodium salt	NL	NL	NL	NL	NL	None

NL = Not Listed as a carcinogen.

Teratogenicity and Reproductive Effects

No data available.

Neurotoxicity

No data available.

Mutagenicity

No data available.

Miscellaneous

1. Lab studies of anionic surfactants in contact with rabbit eyes indicated that they may cause temporary eye damage which healed within one to two days.
2. Dust of sulfonates may cause respiratory allergies.

Symptoms, Acute and Chronic Effects

See specific route responses in Section 3 **Hazards Identification** above.

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SECTION 12 ECOLOGICAL INFORMATION.....

Ecotoxicity or Environmental Toxicity and Fate: 1-Pentanesulfonate, sodium salt: no data available.
Standard Chemical Precautions: Keep out of air, water, and soil

SECTION 13 DISPOSAL CONSIDERATIONS

That which cannot be recovered or recycled, should be disposed of in accordance with all applicable Federal, State, and local environmental regulations.

RCRA waste code(s): None RCRA Hazard Class (40CFR 261): None

SECTION 14 TRANSPORT INFORMATION.....

Ship in accordance with all applicable local, State, Federal, and International transportation regulations.
 The following is a summary only. Check regulations for complete information:

U. S. Department of Transportation (49CFR171.101)
 Shipping Name: Not Listed
 ID Number: NA
 Hazard Class or Division: NA
 Packing Group: NA

SECTION 15 REGULATORY INFORMATION

Reviews, Standards, and Regulations

..... 1-Pentanesulfonate, sodium salt
 CAS Number..... 22767-49-3
 TSCA:..... Y
 EINECS:..... Y
 Number..... 266-195-4
 OSHA Process Safety [29 CFR 1910.119]:..... NL
 CERCLA [Section 103 (40 CFR 302.4)]:..... NL
 RQ (lbs)..... NA
 RCRA Waste Code..... NA
 State Lists:..... NL
 States..... NL on CA
 CA No Significant Risk Level NL
 Clean Air Act
 [Section 112r (40 CFR 68)]: NL
 TQ (lbs)..... NA
 Contains Ozone Depleters (Class I or Class II)..... NL
 Clean Air Act [Section 103 (40 CFR 302.4)]:..... NL
 SARA Title III Notification [40 CFR 302.4]:
 Section 302/304 (EHS) Ingredient [40 CFR 355.3] NL
 TPQ (lbs)..... NA
 RQ (lbs)..... NA
 Section 313 Ingredient [40 CFR 372.65] NL

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Hazard Classes

Sara Title III	Acute	Chronic	Fire	Pressure	Reactivity
	N	N	N	N	N
NFPA	Health	Flammability	Reactivity	Special Hazards	
	1	1	0	None	
HMIS	1	1	0	None	

Risk Phrases:

Caution: The properties of this material have not been fully investigated.

Safety Phrases:

- S3/7/9/14 ... Keep container tightly closed in a cool, well-ventilated place, away from strong oxidizers.
- S22/24/25 .. Do not breathe dust. Avoid contact with skin and eyes.
- S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S36/37/39 .. Wear suitable protective clothing, gloves, and eye/face protection (i.e., lab coats, compatible chemical-resistant gloves, and chemical safety eyewear).

SECTION 16 OTHER INFORMATION

Miscellaneous

The health and toxicological hazards of this compound have not been fully investigated; therefore, this substance must be handled only by, or under close supervision of those qualified in the handling and use of potentially hazardous substances.

This MSDS was revised as follows:

This MSDS was revised in all sections to a new format. Consider all sections to be new information to be reviewed.

Disclaimer

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Approved of by: MBF

This is the last page of this MSDS.

Reviewed and re-approved of with minor changes to the footer abbreviations and format.

by: Jon Pilli

08/04/2008