



SAFETY DATA SHEET

Supersedes Date 28 Jul 2022

Revision Date 13 Feb 2023

Version 3.0

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Label Name Flex Ice
Other means of identification
UPC Code(s) Not applicable
Product code CC19
Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Extraction rinse for all surfaces
Uses advised against Follow label instructions. Not recommended for any use except intended use.

Supplier's details

Supplier Address AramSCO Inc. 4282 South 590 West Salt Lake City, UT 84123 USA	Manufacturer Address AramSCO Inc. 4282 South 590 West Salt Lake City, UT 84123 USA
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Emergency telephone number

Supplier Phone Number	1-800-658-5314
Manufacturer Phone Number	1-800-658-5314
Company Emergency Phone Number	United States: 1-800-535-5053 (INFOTRAC – 24 hours, 7 days a week)
Emergency Telephone	International: 1-352-323-3500 (INFOTRAC – 24 hours, 7 days a week) Poison Control: 1-800-222-1222 (24 hour)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin irritation	Category 2
Serious eye irritation	Category 2

GHS Label elements, including precautionary statements

Emergency Overview

Warning

Hazard Statements
Causes skin irritation
Causes serious eye irritation



Appearance Granular Powder **Physical state** Solid **Odor** No information available

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves, eye protection, face protection

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical attention
IF ON SKIN: Wash with plenty of soap and water
If skin irritation occurs: Get medical attention
Take off contaminated clothing and wash before reuse

Hazards not otherwise classified (HNOC)

Other information

- May be harmful if swallowed
 - Harmful to aquatic life with long lasting effects
 - Harmful to aquatic life
- General Hazards Keep out of reach of children
1.7382% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %	Trade Secret
Sulfamic acid	5329-14-6	30 - 70	*

*The exact percentage (concentration) of composition has been withheld as a trade secret

4. FIRST AID MEASURES

First aid measures for different exposure routes

General advice	If symptoms persist, call a physician. For general assistance, contact your local Poison Control Center.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing.
Skin contact	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician. Remove and wash contaminated clothing before re-use. Immediate medical attention is not required.
Toxic - Inhalation	Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician. Immediate medical attention is not required.

Ingestion Immediate medical attention is not required. Rinse mouth. Drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

Protection of First-aiders Use personal protective equipment.

Most important symptoms/effects, acute and delayed

Main Symptoms No information available.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

No information available.

Hazardous Combustion Products No information available.

Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment. Avoid contact with the skin and the eyes. Evacuate personnel to safe areas. Keep people away from and upwind of spill.

Advice for emergency responders For personal protection see section 8.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information. Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods and materials for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Use personal protective equipment. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid dust formation. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Ensure adequate ventilation. Wear personal protective equipment. Use only in area provided with appropriate exhaust ventilation. Do not breathe vapors or spray mist.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers.

Packaging material Keep product in packaging that product is initially sold in.

Incompatible products None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

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

Appropriate engineering controls

Engineering Measures Showers
 Eyewash stations
 Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Tightly fitting safety goggles. Face-shield.

Skin and body protection No special protective equipment required.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use. Provide regular cleaning of equipment, work area and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Physical state	solid	Odor	Characteristic
Appearance	Granular Powder	Odor threshold	No information available
Color	No information available		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	3.6	
Melting point	No information available	
Boiling point/boiling range	No information available	
Flash Point	No information available	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limits in Air		

Upper Flammability Limit	No information available
Lower Flammability Limit	No information available
Vapor pressure	No information available
Vapor density	No information available
Specific Gravity	0.987
Water solubility	Soluble in water
Solubility in other solvents	No information available
Partition coefficient: n-octanol/water	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Viscosity, kinematic	No information available
Viscosity, dynamic	No information available
Explosive properties	No information available
Oxidizing Properties	No information available

Other information

Softening point	No information available
Molecular weight	No information available
VOC Content(%)	No information available
Density VALUE	0.987
Bulk Density VALUE	No information available

10. STABILITY AND REACTIVITY

Reactivity**Chemical stability**

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Hazardous Polymerization	None under normal processing.
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Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure**Product Information**

Toxic - Inhalation	There is no data available for this product.
Eye contact	Irritating to eyes.
Skin contact	Irritating to skin.
Ingestion	There is no data available for this product.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
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Sulfamic acid 5329-14-6	1450 mg/kg (Rat)		
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Information on toxicological effects

Symptoms No information available.

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

Skin corrosion/irritation No information available.
Eye damage/irritation No information available.
Sensitization No information available.
Germ Cell Mutagenicity No information available.
Carcinogenicity No information available.
Reproductive toxicity No information available.
Developmental Toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Chronic toxicity Avoid repeated exposure.
Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

Unknown acute toxicity 1.7382% of the mixture consists of ingredient(s) of unknown toxicity
The following values are calculated based on chapter 3.1 of the GHS document.
ATEmix (oral) 2299 mg/kg
ATEmix (dermal) 10933 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

61.3882% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Sulfamic acid 5329-14-6		14.2: 96 h Pimephales promelas mg/L LC50 static	

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste Disposal Methods Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT Not regulated

IMDG Not regulated

IATA Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL/NDSL Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

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

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product can expose you to chemicals including Acetaldehyde, which is known to the State of California to cause cancer, and Ethylene Glycol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Sulfamic acid 5329-14-6	X		

U.S. EPA Label information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

NFPA Health hazard 2 Flammability 0 Instability 0 Physical and chemical hazards -

HMIS **Health hazard** 2 **Flammability** 0 **Physical Hazard** 0 **Personal protection** X

Prepared By Aramsco
Environmental Health & Safety

Revision Date 13 Feb 2023

Revision Note

13 Feb 2023 – Update Prop 65 Warning
11 Feb 2022 – Review, no changes made
29 Jan 2021 – Update company information
20 Apr 2015 – Updated Company Emergency Phone Number information

Disclaimer

The (M)SDS is intended to provide a brief summary of our knowledge and guidance regarding the use of this material. The information contained here has been compiled from sources considered by Aramsco to be dependable and is accurate to the best of the Company's knowledge. It is not meant to be an all-inclusive document on worldwide hazard communication regulations.

This information is offered in good faith. Each user of this material needs to evaluate the conditions of use and design the appropriate protective mechanisms to prevent employee exposures, property damage or release to the environment. Aramsco assumes no responsibility for injury to the recipient of third persons, or for any damage to any property resulting from misuse of the product.

End of Material Safety Data Sheet