

MATERIAL SAFETY DATA SHEET

SAFEWAY SF RUNWAY DE-ICER

Substance key: SXR096769
Version : 1 - 2 / USA

Revision Date: 08/04/2005
Date of printing :03/17/2006

Section 01 - Product Information

Identification of the company:

Clariant Corporation
4000 Monroe Road
Charlotte, NC, 28205
Telephone No.: +1 704-331-7000

Information of the substance/preparation:

Product Safety 1-704-331-7710

Emergency tel. number: +1 800-424-9300 CHEMTREC

Trade name: SAFEWAY SF RUNWAY DE-ICER
Synonyms: Product Has No Synonyms
Primary product use: De-icing.
Chemical family: sodium formiate with inhibitor

Section 02 - Composition information on hazardous ingredients

Hazardous ingredients:

Component	CAS-no. (Trade secret no.)	Concentration
Particulates Not Otherwise Regulated (PNOR)		> 1 %

Section 03 - Hazards identification

Expected Route of entry:

Inhalation: yes
Skin contact: yes
Eye contact: yes
Ingestion: no
Skin absorption: no

Health effects of exposure:

Particulates Not Otherwise Regulated (PNOR)

This product is considered as Particulates Not Otherwise Regulated (PNOR). May cause local irritation of eyes, nose, throat, and lungs.

Known effects on other illnesses: Pre-existing eye, skin, and respiratory disorders may be aggravated by exposure to this product.

Listed carcinogen:
IARC: No
NTP: No
OSHA: No
Other: No

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HMIS:

Health: 1

Flammability: 1

Reactivity: 0

Personal protection: F

Section 04 - First aid measures**After inhalation:**

Get victim to fresh air. Give artificial respiration or oxygen if breathing has stopped. Get prompt medical attention. Do not give fluids if victim is unconscious.

After contact with skin:

Wash thoroughly with soap and water for 15 minutes. If skin irritation occurs, seek medical attention.

After contact with eyes:

Immediately flush eyes with running water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Seek prompt medical attention if redness or irritation occurs.

After ingestion:

If ingested, seek medical assistance immediately.

Advice to doctor / Treatment:

None known.

Section 05 - Fire fighting measures

Flashpoint: Not applicable

Lower explosion limit: Not applicable

Upper explosion limit: Not applicable

Self ignition: > 590 °F
Method: VDI 2263 (Grewer)

Ignition temperature: Not applicable

Hazardous combustion products:

In case of fires, hazardous combustion gases are formed: Carbon monoxide (CO)

Extinguishing media: water spray jet
foam

Special fire fighting procedure:

Exercise caution when fighting any chemical fire. Use NIOSH approved self-contained breathing apparatus and full protective clothing.

Unusual fire and explosion hazards:

Emits toxic fumes under fire conditions. This product presents no unusual fire or explosion hazards while sealed in a shipping container. During usage, if a dust cloud is generated, organic powders have the potential to be explosive with static spark or flame initiation.

Section 06 - Accidental release measures

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Steps to be taken in case of spill or leak:

Wear suitable protective equipment. Collect for disposal. Avoid discharge into sewers, on ground or into any body of water.

Section 07 - Handling and storage

Advice on safe handling:

Use good housekeeping practices to keep formation of dusts to a minimum. Take precautionary measures against electrostatic loading - grounding of equipment may be required in some operations to prevent dust explosion hazard. Store in a clean, dry area.

Further info on storage conditions:

Store in original container.
 Keep containers closed.

Section 08 - Exposure controls / personal protection

PARTICULATES NOT OTHERWISE REGULATED RESPIRABLE FRACTION		US OSHA Table Z-1-A Data	Time Weighted Average (TWA):		5 mg/m3
PARTICULATES NOT OTHERWISE REGULATED TOTAL DUST		US OSHA Table Z-1-A Data	Time Weighted Average (TWA):		15 mg/m3
PARTICLES (INSOLUBLE OR POORLY SOLUBLE) NOT OTHERWISE SPECIFIED, RESPIRABLE PARTICLES		US ACGIH Threshold Limit Values Data	Time Weighted Average (TWA):		3 mg/m3
PARTICLES (INSOLUBLE OR POORLY SOLUBLE) NOT OTHERWISE SPECIFIED, INHALABLE PARTICLES		US ACGIH Threshold Limit Values Data	Time Weighted Average (TWA):		10 mg/m3

Respiratory protection:

If airborne concentrations pose a health hazard, become irritating or exceed recommended limits, use a NIOSH approved respirator in accordance with OSHA respiratory protection requirements under 29 CFR 1910.134

Hand protection:

Butyl Rubber, PVC Or Neoprene.

Eye protection:

Splash-proof or dust-resistant goggles

Other protective equipment:

Protective clothing to minimize skin contact should be worn. Chemically resistant safety shoes. Wash contaminated clothing with soap and water and dry before reuse. Safety showers and eyewash stations should be provided in all areas where this material is handled.

Advice on system design:

Use adequate exhaust ventilation and/or dust collection to keep dust levels below exposure limits.

IDLH:

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None

Section 09 - Physical and chemical properties

Form:	solid
Color:	colourless to white
Odor:	slight, original odour
pH:	approx. 11.5 (20 °C, 50 g/l) Method: DIN 19268
Solubility in water:	approx. 870 g/l (22 °C)
Soluble in ... :	fat not determined
Density:	not determined
Melting point :	approx. 500 °F
Boiling point :	not applicable
Vapor pressure:	not determined
Bulk density:	941 kg/m ³ Method: DIN 53466
Relative vapor density:	Not applicable
Partitioning coef. octanol/water:	Not applicable
Viscosity / (dynamic):	Not applicable
Viscosity / (kinematic):	not determined

Section 10 - Stability and reactivity

Thermal decomposition:	> 250 °C
Chemical stability:	Stable.
Hazardous Polymerization:	Will not occur. Conditions to avoid: None known.
Conditions to avoid:	Acidic materials.

Section 11 - Toxicological information

Product information:	
Acute oral toxicity:	LD50 > 2,000 mg/kg (mouse) Source: Analogy
Acute inhalation toxicity:	not determined
Acute dermal toxicity:	not determined

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Skin irritation: Non-irritating (rabbit)
Eye irritation: Non-irritating (rabbit)

Section 12 - Ecological information

Product information:

Biodegradation: > 90 % (28 d)
Method: DIN 38412 T.24

Fish toxicity: LC50 > 1,000 mg/l (96 h, zebra fish)
Method: OECD 203

Daphnia toxicity: EC50 > 4,000 mg/l (48 h, Daphnia magna)
Method: OECD 202

Algae toxicity: EC50 > 10 g/l (72 h, Scenedesmus subspicatus)
Method: OECD 201

Bacteria toxicity: EC0 > 10 g/l
Method: OECD 209

Chemical oxygen demand (COD): approx. 211 mg/g
Method: DIN 38409-H41

Section 13 - Disposal considerations

Waste disposal information:

Recommended disposal is by incineration in approved facilities.

RCRA hazardous waste:

No -- Not as sold.
RCRA number: NONE

Section 14 - Transport information

DOT not restricted
IATA not restricted
IMDG not restricted

Section 15 - Regulatory information

TSCA Status:

All components of this product are listed on the TSCA Inventory.

SARA (section 311/312):

Reactive hazard: no
Pressure hazard: no
Fire hazard: no
Immediate/acute: yes
Delayed/chronic: no

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SARA 313 information:

This product does not contain any toxic chemical listed under Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986.

Clean Water Act:

Contains no known priority pollutants at concentrations greater than 0.1%.

Volatile organic compounds VOC:

Remarks: Not Available

FDA:

This product is not registered with the FDA.

Section 16 - Other information

Other precautions:

Observe all necessary precautions for handling fine powders to control dust. May present dust explosion hazard. Reference exposure limit: ACGIH (TLV) for particulate matter - 10 mg/m³ inhalable particulates, 3 mg/m³ respirable particulates. OSHA Permissible Limit (PEL) for particulate matter: total dust: 15 mg/m³; respirable fraction: 5 mg/m³

Label information:

CAUTION!

MAY CAUSE IRRITATION TO EYES AND SKIN MAY CAUSE IRRITATION TO UPPER RESPIRATORY TRACT.

Avoid breathing dust. Avoid contact with eyes, skin and clothing. Wear proper protective equipment. Keep container closed when not in use. Use with ventilation and/or respiratory protection to keep exposure to a minimum. Wash thoroughly after handling.

Eye contact: immediately flush eyes with running water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Seek prompt medical attention if redness or irritation occurs. Skin contact: wash thoroughly with soap and water for 15 minutes. If skin irritation occurs, seek medical attention. Wash contaminated clothing before reuse. Inhalation: remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen and seek medical attention.

This information is supplied under the OSHA Hazard Communication Standard, 29 CFR 1910.1200, and is offered in good faith based on data available to us that we believe to be true and accurate. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable to the material. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate for that use. No warranty, express or implied, is made regarding the accuracy of this data, the hazards connected with the use of the material, or the results to be obtained from the use thereof. We assume no responsibility for damage or injury from the use of the product described herein. Data provided here are typical and not intended for use as product specifications. (R) and TM indicate trademarks of Clariant AG, its business partners or suppliers.