



SAFETY DATA SHEET

Product #: See Section 1

Name of Product:

Revision Date: Oct. 17, 2015

Ecoway SF

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **Ecoway SF**
SYNONYMS: Formic acid sodium salt
PRODUCT CODES: I000131; I000132

COMPANY IDENTIFICATION: NACHURS ALPINE SOLUTIONS
DIVISION: Marion
ADDRESS: 421 Leader Street, Marion, OH43302, United States

PHONE: 800-622-4877 (USA)
800-265-2268 (CANADA)

EMERGENCY PHONE: United States: Chemtrec: 800-424-9300 (CCN 15189)
Canada: CANUTEC: 1-613-996-6666
I TECH: 1-877-324-4402

CHEMICAL NAME: Sodium Formate
CHEMICAL FAMILY: Formic Acid, Sodium Salt
CHEMICAL FORMULA: HCOONa

PRODUCT USE: Solid Deicer

SECTION 2: HAZARDS IDENTIFICATION

GHS ELEMENTS:

Hazard Classification: Skin Irritation (Category 3).
Eye Irritation (Category 2B).
Acute Toxicity – Inhalation (Category 5).

Pictogram: None Required.

Signal Word: Warning

Hazard Statements: Causes mild skin irritation.
Causes eye irritation.
May be harmful if inhaled.

Precautionary Statements: Use only outdoors or in a well ventilated area. Avoid breathing dust.
Wash skin thoroughly after handling. Wear protective gloves, clothing, eye and face protection.
If swallowed, rinse mouth. Do NOT induce vomiting.
If on hair or skin, remove all contaminated clothing and rinse skin with water.
If inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing.
If in eyes, rinse carefully with water for several minutes. Remove contactlenses, if able and continue rinsing.
Immediately call a poison center or doctor/physician. See First Aid instruction for specific treatment.
If skin irritation occurs, get medical attention.
If eye irritation persists, get medical attention.
If you feel unwell, call a poison center or doctor/physician.
Wash contaminated clothing before reuse.
Absorb spillage to prevent material damage.

POTENTIAL HEALTH EFFECTS

EYES: May cause irritation.
SKIN: May cause irritation.
INGESTION: May cause irritation.
INHALATION: May cause irritation. Do not inhale dust.
ACUTE HEALTH HAZARDS: N/A

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CHRONIC HEALTH HAZARDS: N/A

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: N/A

CARCINOGENICITY:

OSHA: N/A
ACGIH: N/A
NTP: N/A
IARC: N/A
OTHER: N/A

SECTION 2 NOTES: Human health effects of overexposure may cause skin or eye irritation or skin rash, tearing, or blurring of vision.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT:	Sodium Formate Corrosion Inhibitor	>98% <2.0%	CAS# 141-53-7 Proprietary
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SARA 313 REPORTABLE: N/A

OSHA PEL-TWA: N/A

OSHA PEL STEL: N/A

OSHA PEL CEILING: N/A

ACGIH TLV-TWA: N/A

ACGIH TLV STEL: N/A

ACGIH TLV CEILING: N/A

SECTION 4: FIRST AID MEASURES

EYES: Flush with water immediately and thoroughly for 15 minutes. If irritation persists, seek medical attention.

SKIN: May be harmful if absorbed through skin. May cause skin irritation. Wash thoroughly with soap and water. If irritation persists, seek medical attention.

INGESTION: No specific intervention is indicated as compound is not likely to be hazardous by ingestion. Consult a physician if necessary.

INHALATION: May be harmful if inhaled. May cause respiratory tract irritation. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: N/A

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABILITY: Not flammable.

FLAMMABLE LIMITS IN AIR:
(% BY VOLUME) UPPER: N/A
LOWER: N/A

FLASH POINT: >200°F (93°C)

METHOD USED: Tagged closed cup.

AUTOIGNITION TEMPERATURE: N/A

NFPA HAZARD CLASSIFICATION:
HEALTH: 1

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FLAMMABILITY: 0
REACTIVITY: 0
OTHER: 0

HMS HAZARD CLASSIFICATION

HEALTH: 1
FLAMMABILITY: 0
REACTIVITY: 0
PROTECTION: B

EXTINGUISHING MEDIA: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

SPECIAL FIRE FIGHTING PROCEDURES: Use self-contained breathing apparatus and full protective clothing.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon oxides, Sodium/sodium oxides

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Before handling any spills, always observe the safety precautions described in Section 8. Spills can be removed in the dry form with suitable equipment or flushed away with large quantities of water.

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Hygroscopic. Store in a cool dry, well-ventilated area in tightly closed containers. Keep away from acids.

OTHER PRECAUTIONS: N/A

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Keep container tightly closed and protect from moisture. Use ventilation that is adequate to keep employee exposure to airborne dust limited.

VENTILATION: Use ventilation that is adequate to keep employee exposure to airborne dust limited. A dust mask is recommended when handling large quantities in small confined non-ventilated area.

RESPIRATORY PROTECTION: Respiratory protection is not required under normal circumstances. If material is misted, use appropriate NIOSH approved respirator or self-contained breathing apparatus.

EYE PROTECTION: Coverall Chemical splash goggles and full face shield.

SKIN PROTECTION: Rubber or plastic gloves.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: N/A

WORK HYGIENIC PRACTICES: Always follow good safety and industrial hygienic practices.

EXPOSURE GUIDELINES: See section 2.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: white granules

ODOR: slight specific odor.

ODOR THRESHOLD: No data available.

PHYSICAL STATE: Solid/crystalline granular

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pH: 10.0-12.0 (10% solution)

BOILING POINT: F°: Unknown
C°: Unknown

MELTING POINT: F°: >608
C°: >320

FREEZING POINT: F°: N/A
C°: N/A

FLASH POINT: F°: >200
C°: >93

METHOD USED: Tagged Closed Cup

EVAPORATION RATE: N/A

FLAMABILITY: Not flammable.

FLAMMABLE LIMITS IN AIR: UPPER: N/A
(% BY VOLUME) LOWER: N/A

VAPOR PRESSURE (mmHg): N/A

SPECIFIC GRAVITY (kg/m³): 900-950

VAPOR DENSITY (AIR = 1): N/A

DENSITY @ 20°C: 0.9-1.0 kg/l

SOLUBILITY IN WATER: soluble (>3.75 lbs./gal.)

PARTITION COEFFICIENT: n-octanol/water – N/A

PERCENT SOLIDS BY WEIGHT: >98

PERCENT VOLATILE: N/A

VOLATILE ORGANIC COMPOUNDS (VOC): N/A

AUTOIGNITION TEMPERATURE: N/A

THERMON DECOMPOSITIONS: N/A

MOLECULAR WEIGHT: 174.2

SECTION 10: STABILITY AND REACTIVITY

	STABLE	UNSTABLE
STABILITY:	x	
CONDITIONS TO AVOID (STABILITY):	Prevent contamination with other chemicals	
INCOMPATIBILITY (MATERIAL TO AVOID):	Contact with acids	

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HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Thermal decomposition may generate carbon monoxide and carbon dioxide.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID (POLYMERIZATION): N/A

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: Acute oral toxicity LD50: >2000 mg/kg (rats).IE
Acute inhalation toxicity LC50: >680 mg/m³ (dust, rats, 4 hrs.).
LC0: >680 mg/m³ (dust, rats, 4 hrs). No mortality during 14 day observation.
Skin irritation: nonirritant (Rabbits).
Eye irritation: nonirritant (Rabbits).

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: Biological elimination: >90% (Static test, 7 days) DIN 38 412-L25) Toxicity to bacteria ECo:> 10000 (OECD 209, after 3 hours)
Chemical oxygen demand COD: - 211 mg oxygen/g. (DIN 38409-H41) Daphnia acute toxicity ECo: 3.3 g/l (24h); 3.2 g/l (48h)
EC50: 4.8 g/l (24h); 4.4 g/l (48h)
Fish Toxicity LC50:.1000 mg/l (96 h, Zebra fish, OECD 203)

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Reclaim and reuse as much as possible. Dispose in accordance with all federal, state, and local regulations.

RCRA HAZARD CLASS: N/A

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION:

PROPER SHIPPING NAME: Ecoway SF (Sodium Formate)
HAZARD CLASS: N/A
ID NUMBER: N/A
PACKING GROUP: N/A
LABEL STATEMENT: N/A

WATER TRANSPORTATION:

PROPER SHIPPING NAME: Ecoway SF (Sodium Formate)
HAZARD CLASS: N/A
ID NUMBER: N/A
PACKING GROUP: N/A
LABEL STATEMENTS: N/A

AIR TRANSPORTATION:

PROPER SHIPPING NAME: Ecoway SF (Sodium Formate)
HAZARD CLASS: N/A
ID NUMBER: N/A
PACKING GROUP: N/A
LABEL STATEMENTS: N/A

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

TSCA (TOXIC SUBSTANCE CONTROL ACT): Yes

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CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT):	No
SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):	N/A
311/312 HAZARD CATEGORIES:	N/A
313 REPORTABLE INGREDIENTS:	N/A

SECTION 16: OTHER INFORMATION

PREPARATION INFORMATION: *Technical Services*

DISCLAIMER: The information contained herein is offered only as a guide to the handling of this specific material and has been prepared in good faith by technically knowledgeable personnel. It is not intended to be all-inclusive and the manner and conditions of use and handling may involve other and additional considerations. No warranty of any kind is given or implied and NACHURS ALPINE SOLUTIONS will not be liable for any damages, losses, injuries or consequential damages which may result from the use or reliance on any information contained herein.

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NEWDEAL® BLEND DEICER SINGLE-PULL SUPER SACK OPERATION

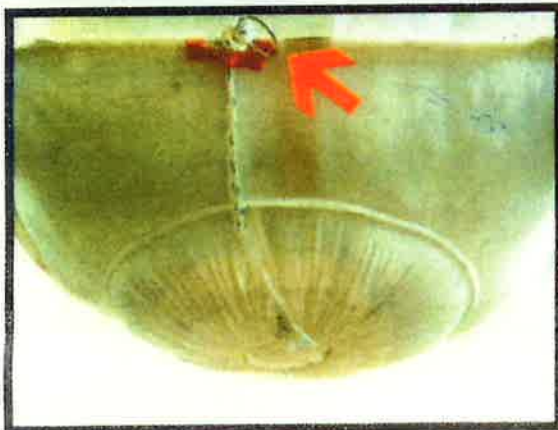
NEWDEAL® Super Sack



STEP 1—Lift bag with forklift



STEP 2—Pull bag release (ring)



Material will discharge within seconds

