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

1.1 Product information

Commercial Product Name
NIAPROOF Anionic Surfactant 4
Chemical C₁₄H₂₉SO₄Na

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance/Mixture
Wetting agent, Penetrant
Recommended restrictions on use
Reserved for industrial and professional use.

1.3 Details of the supplier of the safety data sheet

Niacet Corporation
400 47th Street
Niagara Falls, NY
14304 U.S.A.
Telephone +1 716-285-1474 Telefax +1 716-285-1497
niacetcsr@niacet.com

1.4 Emergency telephone number

For Niacet Corporation, Niagara Falls, U.S.A. products:
Chemtrec: +1 (800) 424 9300, +1 (703) 527-3887

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to OSHA Hazards
No exposure limits have been set by OSHA, NIOSH or ACGIH

Classification according to GHS Classification
No Data Available
2.2 Label elements

Labeling according to GHS Label elements, including precautionary statements

No Data Available

2.3 Other hazards

| Inhilation | If irritation develops, remove to fresh air |
| Skin       | Contact may cause irritation and drying of skin. Wash area with soap and water. Seek medical attention if irritation persists. |
| Eyes       | Causes irritation and burns. Flush with water for at least 15 minutes, hold eyelids open. Seek medical attention. |
| Ingestion  | Harmful if swallowed. Seek medical attention. |

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

| Chemical nature: NIAPROOF Anionic Surfactant 4 |
| Formula: C_{14}H_{29}SO_{4}Na |
| Synonyms: NAS 4, NIAPROOF 4, sodium tetradecyl sulfate |
| Sodium tetradeyl sulfate CAS-No. 139-88-8 |
| (7 methyl 2 ethyl undecanol sulfate sodium salt) |
| Diethylene Glycol Ethyl Ether CAS-No. 11-90-0 |
| Sodium Chloride CAS-No. 7647-14-5 |
| Water CAS-No. 7732-18-5 |

4. FIRST AID MEASURES

4.1 Description of first aid measures

General Consult a physician. Show this safety data sheet to the doctor in attendance.

Inhilation Move the exposed person to fresh air at once. If irritation persists, consult a physician.

Skin Contact Contact may cause irritation and drying of skin. Wash area with soap and water. Seek medical attention if irritation persists.

Eye Contact Flush with water for at least 15 minutes, holding eyelids open. Seek medical attention.

Ingestion If swallowed, give victim milk or water to dilute stomach contents. Seek medical attention.
4.2 Most important symptoms and effects, both acute and delayed
Symptoms : Eyes may redder and burn. Skin may be stripped of natural oils and redden.

4.3 Indication of immediate medical attention and special treatment needed, if necessary
Treatment : No information available.

5. FIREFIGHTING MEASURES – NOT FLAMMABLE OR COMBUSTABLE

5.1 Extinguishing media
Extinguishing media: Water Fog, alcohol foam, carbon dioxide, dry chemical

5.2 Special hazards arising from the substance or mixture
Hazardous decomposition products formed under fire conditions. – Sulfur oxides, carbon monoxide

5.3 Special protective actions for fire-fighters
Wear self contained breathing apparatus for firefighting if necessary.

5.4 Further Information
Not Flammable or Combustible

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Wear respiratory protection. Ensure adequate ventilation.

6.2 Environmental precautions
Keep unnecessary people away. Isolate hazard area, enter with appropriate safety equipment. Contain spill with earthen dyke. Pump solution into a suitable container. Take up remainder with absorbent material for later disposal. Wash down area with large quantities of water.

6.3 Methods and materials for containment and cleaning up
Material is more than 80% biodegradable. Dispose of in accordance with applicable Federal, state and local regulations.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling
Avoid contact with skin and eyes. Provide appropriate exhaust ventilation.

7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end uses
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Exposure Limit Values
   No exposure limits have been set by OSHA, NIOSH, or ACGIH

8.2.1 Appropriate engineering controls
   Handle in accordance with good industrial hygiene and safety practice. In case of insufficient ventilation, wear suitable respiratory equipment. Ensure that eyewash stations and safety showers are close to the workstation location.

8.2.2 Individual protection measures, such as personal protective equipment

Hand protection
   Plastic or rubber gloves recommended.

Eye protection
   Wear approved safety glasses

Skin and body protection
   Clothing suitable to prevent skin contact.

Respiratory protection
   Ventilate well and avoid breathing vapors. If airborne concentrations become irritating use a NIOSH approved respirator

Hygiene Measures
   Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke
9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

General Information (appearance, odor)

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Colorless to Light Amber</td>
</tr>
<tr>
<td>Odor</td>
<td>Characteristic, mild</td>
</tr>
</tbody>
</table>

Important health safety and environmental information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash point</td>
<td>None – closed cup</td>
</tr>
<tr>
<td>Melting point / freezing point</td>
<td>&lt;10°C</td>
</tr>
<tr>
<td>pH</td>
<td>9.0-10.5</td>
</tr>
<tr>
<td>Boiling point</td>
<td>100°C</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>no data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>no data available</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>no data available</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>no data available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>(17.5 mmHg) at 25°C</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.05-1.06 at 25°C</td>
</tr>
<tr>
<td>Water solubility</td>
<td>Miscible</td>
</tr>
<tr>
<td>Partition coefficient: noptanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative Vapor Density</td>
<td>No data available</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
</tr>
</tbody>
</table>
9.2 Other data

Surface tension: no data available

10. STABILITY AND REACTIVITY

10.1 Reactivity
No dangerous reaction known under conditions of normal use.

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
Hazardous reactions: no data available

10.4 Conditions to avoid
Conditions to avoid: no data available.

10.5 Incompatible materials
Materials to avoid: Strong oxidizing agents,

10.6 Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. – Sulfur oxides, carbon monoxide

Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

LD50/Oral/Rat: 5 ml/kg

Irritation and corrosion
Causes irritation of eyes. Can cause irritation and drying of skin

Sensitization
Respiratory or Skin: Can cause irritation
Long term toxicity

Carcinogenicity: OSHA: No
IARC: No
NTP: No

Reproductive: No Data Available

Specific Target Organ: No Data Available

Aspiration Hazard: No Data Available

Information on the likely routes of exposure

Inhalation
If irritation develops, remove to fresh air

Ingestion
If swallowed, give victim milk or water to dilute stomach contents. Get medical attention

Skin contact
Contact may cause irritation and drying of skin. Wash area with soap and water. Get medical attention if irritation persists.

Eye contact
Causes irritation and burns. Flush with water for at least 15 minutes, hold eyelids open. Get medical attention

Signs and Symptoms of Exposure
Eyes may redden and burn. Skin may be stripped of natural oils and redden

Additional Information

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity effects

Toxicity to other organisms
Toxicity to daphnia and other aquatic invertebrates
EC50-24 h: 4,350 mg/l – Daphnia magna (water flea)
Published data

12.2 Persistence and degradability

Biological degradability: Not Readily Biodegradable

Readily biodegradable: No Data Available

7/9
12.3 Bioaccumulative potential
No Data Available

12.4. Mobility in soil
No Data Available

12.5. Results of PBT and vPvB assessment
No Data Available

12.6 Other adverse effects
Product does not have any known adverse effects on the aquatic organisms tested.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated Packaging
Dispose of as unused product in accordance with federal, state and local regulations

14. TRANSPORT INFORMATION

14.1 UN number
Not classified as dangerous goods

DOT (US)
Not classified as dangerous in the meaning of transport regulations

IMDG
Not classified as dangerous in the meaning of transport regulations

IATA
Not classified as dangerous in the meaning of transport regulations
15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

<table>
<thead>
<tr>
<th>Regulated under</th>
<th>Yes (all ingredients)</th>
<th>Yes (all ingredients)</th>
<th>No</th>
<th>No</th>
<th>No</th>
<th>Hazardous substance list, hazardous substances on the list must be identified when present in products. Components present in this product at a level which could require reporting under the statute are:</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA Inventory</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Glycol Ethers CAS-No. None Upper bound Concentration 20%</td>
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<tr>
<td>ENEICS</td>
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<tr>
<td>OSHA Hazard</td>
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<tr>
<td>Regulated under RECRA</td>
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<tr>
<td>Regulated under CERCLA</td>
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<tr>
<td>Regulated under SARA Title III</td>
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</tbody>
</table>

15.2 Chemical Safety Assessment

Not applicable

16. OTHER INFORMATION

Training advice

Read the safety data sheet before using the product.

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Sources of key data used to compile the Safety Data Sheet

Regulations, databases, literature, own tests.

Additions, Deletions, Revisions