

SECTION 1: Identification

1.1. Identification

Product form : Mixtures
 Name : Zerust[®] Axxanol[™] Spray-G
 Synonyms : Axxanol Spray-G, Spray-G
 Other means of identification : EU SDS: 10-043

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

Use of the substance/mixture : Corrosion inhibitors

1.3. Details of the supplier of the safety data sheet

Northern Technologies International Corporation
 4201 Woodland Road
 Circle Pines, MN 55014 - United States
 T +1 763-225-6600 - F +1 763-225-6645
msds@ntic.com - www.zerust.com

1.4. Emergency telephone number

Emergency number : Carechem +1 202 464 2554; Outside US/Canada +44 1865 407333 (24 hours; 7 days/week)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Flammable liquids, Category 4 Combustible liquid
 Hazardous to the aquatic environment — Acute Hazard, Category 3 Harmful to aquatic life

2.2. Label elements

GHS-US labelling

Signal word (GHS-US) : Warning
 Hazard statements (GHS-US) : Combustible liquid
 Harmful to aquatic life
 Precautionary statements (GHS-US) : Keep away from open flames, sparks. - No smoking
 Avoid release to the environment
 Wear eye protection, protective gloves
 In case of fire: Use carbon dioxide (CO₂), dry chemical powder, foam to extinguish
 Store in a well-ventilated place. Keep cool
 Dispose of contents/container to National regulations

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
Petroleum distillates, hydrotreated light	(CAS No) 64742-47-8	20 - 50	Flam. Liq. 4, H227 Asp. Tox. 1, H304 Aquatic Acute 3, H402
Benzenesulfonic acid, dodecyl-, calcium salt	(CAS No) 26264-06-2	<3	Acute Tox. 4 (Oral), H302 Aquatic Acute 3, H402
Amines, C12-14-alkyl, C6-10-alkyl phosphates	(CAS No) 68603-55-4	<2	Eye Irrit. 2A, H319

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Full text of hazard classes and H-statements : see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Assure fresh air breathing. Allow the victim to rest.
- First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
- First-aid measures after eye contact : Rinse immediately with plenty of water. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Combustible liquid.
- Explosion hazard : May form flammable/explosive vapour-air mixture.
- Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.

6.1.1. For non-emergency personnel

- Protective equipment : Refer to protective measures listed in Sections 7 and 8.
- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Dispose of in accordance with relevant local regulations.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Additional hazards when processed : Handle empty containers with care because residual vapours are flammable. Keep away from hot surfaces, open flames, sparks, heat. - No smoking.
- Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide adequate ventilation to minimize dust and/or vapour concentrations. No open flames. No smoking.

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Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed.
Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Incompatible materials. Keep container closed when not in use. Keep in fireproof place.
Incompatible materials : Heat sources.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional information : Contains no substances with occupational exposure limits

8.2. Exposure controls

Appropriate engineering controls : Provide adequate general and local exhaust ventilation.
Personal protective equipment : Gloves. Protective goggles. Mist formation: aerosol mask. Avoid all unnecessary exposure.



Hand protection : Wear protective gloves.
Eye protection : Chemical goggles or safety glasses.
Respiratory protection : During spraying wear suitable respiratory equipment. No respiratory protection is ordinarily required under normal conditions of use.
Other information : Keep away from sources of ignition - No smoking. Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Viscous.
Colour : light brown.
Odour : characteristic.
Odour threshold : No data available
pH : No data available
Relative evaporation rate (butylacetate=1) : No data available
Melting point : No data available
Freezing point : No data available
Boiling point : No data available
Flash point : 80.5 °C
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : No data available
Vapour pressure : No data available
Relative vapour density at 20 °C : No data available
Relative density : No data available
Density : 0.83 - 0.93 g/cm³
Solubility : No data available
Log Pow : No data available
Log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : 840 - 860 cP at 25 C
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : No data available

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9.2. Other information

VOC content : ≤ 40 %

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

The product is stable at normal handling and storage conditions. Combustible liquid. May form flammable/explosive vapour-air mixture.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Open flame. Overheating. Direct sunlight. Heat. Sparks.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Benzenesulfonic acid, dodecyl-, calcium salt (26264-06-2)

LD50 oral rat	1300 mg/kg
ATE US (oral)	1300.000 mg/kg bodyweight

Petroleum distillates, hydrotreated light (64742-47-8)

LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Harmful to aquatic life.

Benzenesulfonic acid, dodecyl-, calcium salt (26264-06-2)

LC50 fish 1	10.8 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
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Petroleum distillates, hydrotreated light (64742-47-8)

LC50 fish 1	45 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
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12.2. Persistence and degradability

Zerust® Axxanol™ Spray-G	
Persistence and degradability	Not established.
Benzenesulfonic acid, dodecyl-, calcium salt (26264-06-2)	
Persistence and degradability	Not established.
Petroleum distillates, hydrotreated light (64742-47-8)	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Zerust® Axxanol™ Spray-G	
Bioaccumulative potential	Not established.
Benzenesulfonic acid, dodecyl-, calcium salt (26264-06-2)	
Bioaccumulative potential	Not established.
Petroleum distillates, hydrotreated light (64742-47-8)	
BCF fish 1	61 - 159
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	: Recycle or dispose of in compliance with current legislation.
Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Additional information	: Handle empty containers with care because residual vapours are flammable.
Ecology - waste materials	: Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT (49 CFR 100-185): Not regulated

Other information : No supplementary information available.

Transport by sea

In accordance with IMDG: Not regulated

Air transport

In accordance with IATA: Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations

Benzenesulfonic acid, dodecyl-, calcium salt (26264-06-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
CERCLA RQ	1000 lb
Amines, C12-14-alkyl, C6-10-alkyl phosphates (68603-55-4)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Petroleum distillates, hydrotreated light (64742-47-8)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

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All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

15.2. International regulations

CANADA

Zerust® Axxanol™ Spray-G

WHMIS Classification Class B Division 3 - Combustible Liquid

Benzenesulfonic acid, dodecyl-, calcium salt (26264-06-2)

Listed on the Canadian DSL (Domestic Substances List)

WHMIS Classification Class D Division 2 Subdivision B - Toxic material causing other toxic effects

Amines, C12-14-alkyl, C6-10-alkyl phosphates (68603-55-4)

Listed on the Canadian DSL (Domestic Substances List)

WHMIS Classification Class D Division 2 Subdivision B - Toxic material causing other toxic effects

Petroleum distillates, hydrotreated light (64742-47-8)

Listed on the Canadian DSL (Domestic Substances List)

WHMIS Classification Class B Division 3 - Combustible Liquid

EU-Regulations

Benzenesulfonic acid, dodecyl-, calcium salt (26264-06-2)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Amines, C12-14-alkyl, C6-10-alkyl phosphates (68603-55-4)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Petroleum distillates, hydrotreated light (64742-47-8)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

15.3. US State regulations

Benzenesulfonic acid, dodecyl-, calcium salt (26264-06-2)

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Revision date : 3/7/2017

Other information : None.

Full text of H-statements:

H227	Combustible liquid
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H319	Causes serious eye irritation
H402	Harmful to aquatic life

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