

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Product name : Zerust<sup>®</sup> Axxanol<sup>™</sup> Z-Maxx  
Synonyms : Axxanol Z-Maxx #2, Z-Maxx  
Other means of identification : EU SDS: 10-259

#### 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  
P.O. Box 69  
Circle Pines, MN 55014 - United States  
T +1 763-225-6600 - F +1 763-225-6645  
[msds@ntic.com](mailto:msds@ntic.com) - [www.zerust.com](http://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

Serious eye damage/eye irritation, Category 2 H319

Full text of H statements : see section 16

#### 2.2. Label elements

##### GHS-US labelling

Hazard pictograms (GHS-US) :



GHS07

Signal word (GHS-US) :

Warning

Hazard statements (GHS-US) :

H319 - Causes serious eye irritation

Precautionary statements (GHS-US) :

P264 - Wash hands thoroughly after handling  
P280 - Wear eye protection, protective gloves  
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P337+P313 - If eye irritation persists: Get medical advice/attention

#### 2.3. Other hazards

Other hazards not contributing to the classification

: None known.

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

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Name	Product identifier	%	GHS-US classification
Distillates, petroleum, solvent-dewaxed heavy paraffinic	(CAS-No.) 64742-65-0	30 - 60	Not classified
Benzenesulfonic acid, C10-16-alkyl derivatives	(CAS-No.) 68584-22-5	3 - 7	Eye Irrit. 2A, H319
Boric acid (HBO <sub>2</sub> ), calcium salt	(CAS-No.) 13701-64-9	1 - 5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
Benzenesulfonic acid, dodecyl-, calcium salt	(CAS-No.) 26264-06-2	<=3	Acute Tox. 4 (Oral), H302 Aquatic Acute 3, H402

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 : If you feel unwell, seek medical advice (show the label where possible). Never give anything by mouth to an unconscious person.
- First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
- First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Get medical advice/attention if you feel unwell.

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

- Symptoms/effects after eye contact : Causes serious eye irritation.

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

No additional information available

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

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

#### 5.2. Special hazards arising from the substance or 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.
- 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

##### 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.

#### 6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : On land, sweep or shovel into suitable containers.

#### 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

- Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

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Hygiene measures : Wash hands, forearms and face thoroughly after handling.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a dry place. Keep container closed when not in use. Keep container tightly closed.  
Incompatible products : None known.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Distillates, petroleum, solvent-dewaxed heavy paraffinic (64742-65-0)

USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> Refined mineral oil, mist
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### 8.2. Exposure controls

Appropriate engineering controls : If the occupational exposure limit is exceeded: Ensure adequate ventilation.  
Personal protective equipment : Gloves. Safety glasses. Avoid all unnecessary exposure.



Hand protection : Wear protective gloves.  
Eye protection : Chemical goggles or safety glasses.  
Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. During spraying wear suitable respiratory equipment.  
Other information : Do not eat, drink or smoke when using this product.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state : Solid  
Appearance : Grease.  
Colour : light brown.  
Odour : petroleum-like odour.  
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 : 246 °C  
Auto-ignition temperature : > 315 °C  
Decomposition temperature : No data available  
Flammability (solid, gas) : No data available  
Vapour pressure : < 0.1 mm Hg  
Relative vapour density at 20 °C : No data available  
Relative density : No data available  
Density : 1 g/cm<sup>3</sup>  
Solubility : insoluble in water.  
Log Pow : No data available  
Log Kow : No data available  
Viscosity, kinematic : No data available  
Viscosity, dynamic : No data available  
Explosive properties : No data available  
Oxidising properties : No data available  
Explosive limits : No data available

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### 9.2. Other information

No additional information available

## 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.

### 10.3. Possibility of hazardous reactions

None under normal use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

None known.

### 10.6. Hazardous decomposition products

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

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

<b>Benzenesulfonic acid, dodecyl-, calcium salt (26264-06-2)</b>	
LD50 oral rat	1300 mg/kg
ATE US (oral)	1300 mg/kg bodyweight
<b>Distillates, petroleum, solvent-dewaxed heavy paraffinic (64742-65-0)</b>	
LD50 oral rat	> 15000 mg/kg
LD50 dermal rabbit	> 5000 mg/kg
LC50 inhalation rat (mg/l)	> 2400 mg/m <sup>3</sup> (Exposure time: 4 h)
<b>Benzenesulfonic acid, C10-16-alkyl derivatives (68584-22-5)</b>	
LD50 oral rat	775 mg/kg
LD50 dermal rabbit	2000 mg/kg

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Based on available data, the classification criteria are not met

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Based on available data, the classification criteria are not met

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.

Symptoms/effects after eye contact : Causes serious eye irritation.

## SECTION 12: Ecological information

### 12.1. Toxicity

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<b>Benzenesulfonic acid, dodecyl-, calcium salt (26264-06-2)</b>	
LC50 fish 1	10.8 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
<b>Distillates, petroleum, solvent-dewaxed heavy paraffinic (64742-65-0)</b>	
LC50 fish 1	> 5000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Daphnia 1	> 1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)
<b>Benzenesulfonic acid, C10-16-alkyl derivatives (68584-22-5)</b>	
LC50 fish 1	3 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 1	2.9 mg/l (Exposure time: 48 h - Species: Daphnia magna)

### 12.2. Persistence and degradability

<b>Zerust® Axxanol™ Z-Maxx</b>	
Persistence and degradability	Not established.
<b>Benzenesulfonic acid, dodecyl-, calcium salt (26264-06-2)</b>	
Persistence and degradability	Not established.

### 12.3. Bioaccumulative potential

<b>Zerust® Axxanol™ Z-Maxx</b>	
Bioaccumulative potential	Not established.
<b>Benzenesulfonic acid, dodecyl-, calcium salt (26264-06-2)</b>	
Bioaccumulative potential	Not established.
<b>Benzenesulfonic acid, C10-16-alkyl derivatives (68584-22-5)</b>	
Log Pow	2 (at 23 °C)

### 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.
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Additional information	: Product in unopened original container prior to use does not meet criteria for hazardous waste according to 40 CFR 261 (no components listed on F, K, P or U lists; not ignitable, not corrosive, not reactive and not toxic).
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

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

Listed on the United States TSCA (Toxic Substances Control Act) inventory

CERCLA RQ 1000 lb

### **Distillates, petroleum, solvent-dewaxed heavy paraffinic (64742-65-0)**

Listed on the United States TSCA (Toxic Substances Control Act) inventory

### **Benzenesulfonic acid, C10-16-alkyl derivatives (68584-22-5)**

Listed on the United States TSCA (Toxic Substances Control Act) inventory

### **Boric acid (HBO2), calcium salt (13701-64-9)**

Listed on the United States TSCA (Toxic Substances Control Act) inventory

### **Zerust® Axxanol™ Z-Maxx**

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

#### **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

#### **Distillates, petroleum, solvent-dewaxed heavy paraffinic (64742-65-0)**

Listed on the Canadian DSL (Domestic Substances List)

#### **Benzenesulfonic acid, C10-16-alkyl derivatives (68584-22-5)**

Listed on the Canadian DSL (Domestic Substances List)

#### **Boric acid (HBO2), calcium salt (13701-64-9)**

Listed on the Canadian DSL (Domestic Substances List)

### EU-Regulations

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

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

#### **Distillates, petroleum, solvent-dewaxed heavy paraffinic (64742-65-0)**

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

#### **Benzenesulfonic acid, C10-16-alkyl derivatives (68584-22-5)**

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

#### **Boric acid (HBO2), calcium salt (13701-64-9)**

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 : 12/6/2017  
Data sources : Classification according to Regulation (EC) No. 1272/2008 [CLP]. Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]. Classification GHS-UN (SDS-16).  
Other information : None.

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Full text of H-statements:

H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H402	Harmful to aquatic life

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