

# ASHLAND

## SAFETY DATA SHEET

Page: 1

Revision Date: 05/30/2013

Print Date: 8/26/2014

MSDS Number: R0300109

Version: 3.8

Amersite™ 11 CORROSION INHIBITOR  
™ Trademark, Solenis or its subsidiaries or affiliates,  
registered in various countries100167

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

Ashland	Regulatory Information Number	1-800-325-3751
P.O. Box 2219	Telephone	614-790-3333
Columbus, OH 43216	Emergency telephone number	1-800-ASHLAND (1-800-274-5263)
Product name	Amersite™ 11 CORROSION INHIBITOR ™ Trademark, Solenis or its subsidiaries or affiliates, registered in various countries	
Product code	100167	

### 2. HAZARDS IDENTIFICATION

#### Emergency Overview

Appearance: liquid, greenish-blue

WARNING! MAY BE HARMFUL IF SWALLOWED. CAUSES EYE IRRITATION. CAUSES SKIN AND RESPIRATORY TRACT IRRITATION.

#### Potential Health Effects

##### **Exposure routes**

Inhalation, Skin absorption, Skin contact, Eye Contact, Ingestion

##### **Eye contact**

Can cause severe eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes. Can injure eye tissue. Solutions may be severely irritating or cause burns.

##### **Skin contact**

Can cause severe skin irritation. Symptoms may include redness and burning of skin, and other skin damage. The feeling of irritation or pain may be delayed.

##### **Ingestion**

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.

##### **Inhalation**

It is possible to breathe this material under certain conditions of handling and use (for example, during heating, spraying, or stirring). Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.). Excessive heat or contact with acids, water and/or ice, releases sulfur dioxide gas which may be harmful or deadly if inhaled.

##### **Aggravated Medical Condition**

# ASHLAND

## SAFETY DATA SHEET

Page: 2

Revision Date: 05/30/2013

Print Date: 8/26/2014

MSDS Number: R0300109

Version: 3.8

Amersite™ 11 CORROSION INHIBITOR

™ Trademark, Solenis or its subsidiaries or affiliates,  
registered in various countries100167

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: Skin, Upper respiratory tract, lung (for example, asthma-like conditions)

### Symptoms

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), Cough, Lowered blood pressure, Difficulty in breathing, lung edema (fluid buildup in the lung tissue), lung damage, damage to the mouth, throat, and/or airways, Exposure to this product (or a component) may cause an allergic reaction (narrowing of the air passages of the lungs resulting in difficult breathing, tightness in the chest, coughing and wheezing) in some sensitive individuals. Other symptoms of an allergic reaction may include itchy and watery eyes, runny and stuffy nose, sweating, flushing, hives, rapid heart rate, and lowered blood pressure.

### Target Organs

Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects, mild, reversible kidney effects

### Carcinogenicity

This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA).

### Reproductive hazard

Based on the available information, risk to the fetus from maternal exposure to this material cannot be assessed.

### Other information

Exposure to this material may cause severe or fatal allergic reaction in some asthmatics and sulfite sensitive individuals. Allergic reactions are immediate following breathing, injection or ingestion of oral solutions. Ingestion of solids or food particles may delay the onset of symptoms, with a maximal effect 30 to 90 minutes after ingestion.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components	CAS-No. / Trade Secret No.	Concentration
SODIUM SULFITE	7757-83-7	>=10-<15%
SODIUM HYDROXIDE	1310-73-2	>=1.5-<5%
ORGANIC SALT	254504001-5244	>=1.5-<5%

## 4. FIRST AID MEASURES

Eyes

# ASHLAND

## SAFETY DATA SHEET

Page: 3

Revision Date: 05/30/2013

Print Date: 8/26/2014

MSDS Number: R0300109

Version: 3.8

Amersite™ 11 CORROSION INHIBITOR  
™ Trademark, Solenis or its subsidiaries or affiliates,  
registered in various countries100167

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention. Do not remove the victim from water access for transport to a medical facility unless instructed to do so by qualified medical personnel. If possible, continue flushing the eye gently with water while transporting the victim.

### Skin

Remove contaminated clothing. Flush exposed area with large amounts of water. If skin is damaged, seek immediate medical attention. If skin is not damaged and symptoms persist, seek medical attention. Launder clothing before reuse.

### Ingestion

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

### Inhalation

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

### Notes to physician

**Hazards:** Sulfur dioxide may be released if this material comes into contact with acids, water and/or ice. In contact with moisture, sulfur dioxide forms sulfuric acid which is corrosive to skin and mucous membranes.

**Treatment:** No information available.

## 5. FIREFIGHTING MEASURES

### Suitable extinguishing media

Dry chemical, Carbon dioxide (CO<sub>2</sub>), Water spray

### Hazardous combustion products

carbon dioxide and carbon monoxide, corrosive vapors, Hydrocarbons, sodium monoxide, Sodium oxides, sodium sulfide residue, sulfur dioxide, toxic fumes

### Precautions for fire-fighting

Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning material with water used for cooling purposes.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions

For personal protection see section 8. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.

### Environmental precautions

# ASHLAND

## SAFETY DATA SHEET

Page: 4

Revision Date: 05/30/2013

Print Date: 8/26/2014

MSDS Number: R0300109

Version: 3.8

Amersite™ 11 CORROSION INHIBITOR

™ Trademark, Solenis or its subsidiaries or affiliates,  
registered in various countries 100167

Prevent spreading over a wide area (e.g. by containment or oil barriers). Do not let product enter drains. Do not flush into surface water or sanitary sewer system.

### Methods for cleaning up

Keep in suitable, closed containers for disposal. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

### Other information

Comply with all applicable federal, state, and local regulations.

## 7. HANDLING AND STORAGE

### Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed.

### Storage

Store in closed containers in a dry, well-ventilated area. Keep from freezing.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

SODIUM HYDROXIDE		1310-73-2
ACGIH	Ceiling Limit Value:	2 mg/m3
NIOSH	Ceiling Limit Value and Time Period (if specified):	2 mg/m3
OSHA Z1	Permissible exposure limit	2 mg/m3

### General advice

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

### Exposure controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

### Eye protection

Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist. Maintain eye wash station near work area.

### Skin and body protection

# ASHLAND

## SAFETY DATA SHEET

Page: 5

Revision Date: 05/30/2013

Print Date: 8/26/2014

MSDS Number: R0300109

Version: 3.8

Amersite™ 11 CORROSION INHIBITOR  
™ Trademark, Solenis or its subsidiaries or affiliates,  
registered in various countries100167

Wear appropriate chemical impervious clothing and boots whenever there is potential for skin contact with product. Launder clothing before reuse. Maintain safety shower at all locations where skin contact could occur. Contact your local safety equipment supplier to assist the facility in determining proper selection of personal protective equipment for the applications/operations present at your facility. Wear resistant gloves (consult your safety equipment supplier). Discard gloves that show tears, pinholes, or signs of wear.

### Respiratory protection

A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	liquid
Colour	greenish-blue
Boiling point/boiling range	212 °F / 100 °C @ 1,013.33 hPa Calculated Phase Transition Liquid/Gas
pH	13.49
Density	1.142 g/cm3 @ 77 °F / 25 °C 9.5 lb/gal @ 77 °F / 25 °C

## 10. STABILITY AND REACTIVITY

### Stability

Stable.

### Conditions to avoid

excessive heat, Exposure to sunlight., Exposure to moisture.

### Incompatible products

Acids, halogenated hydrocarbons, Metals, organic nitro compounds, Strong oxidizing agents, water

### Hazardous decomposition products

carbon dioxide and carbon monoxide, corrosive vapors, Hydrocarbons, Sodium oxides, sodium sulfide residue, toxic fumes

### Hazardous reactions

Product will not undergo hazardous polymerization.

# ASHLAND®

## SAFETY DATA SHEET

Page: 6

Revision Date: 05/30/2013

Print Date: 8/26/2014

MSDS Number: R0300109

Version: 3.8

Amersite™ 11 CORROSION INHIBITOR

™ Trademark, Solenis or its subsidiaries or affiliates,  
registered in various countries 100167

### 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation  
Skin absorption  
Skin contact  
Eye Contact  
Ingestion

#### **Product**

Acute oral toxicity : no data available

Acute inhalation toxicity : no data available

Acute dermal toxicity : no data available

Skin corrosion/irritation : no data available

Serious eye damage/eye irritation : no data available

Respiratory or skin sensitisation : no data available

Target Organ Systemic Toxicant - Repeated exposure : Target Organs: Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects, mild, reversible kidney effects

#### **Components:**

##### **SODIUM SULFITE:**

Acute oral toxicity : LD 50 Mouse: 820 mg/kg

STOT - single exposure : Assessment: May cause respiratory irritation.

##### **SODIUM HYDROXIDE:**

Acute oral toxicity : LD Lo Rabbit: 500 mg/kg

Acute dermal toxicity : LD 50 Rabbit: 1,350 mg/kg

### 12. ECOLOGICAL INFORMATION

# ASHLAND

## SAFETY DATA SHEET

Page: 7

Revision Date: 05/30/2013

Print Date: 8/26/2014

MSDS Number: R0300109

Version: 3.8

Amersite™ 11 CORROSION INHIBITOR  
™ Trademark, Solenis or its subsidiaries or affiliates,  
registered in various countries100167

### Ecotoxicity

#### Product:

- Toxicity to fish : LC 50 (Pimephales promelas (fathead minnow)): 8,400 mg/l  
Exposure time: 96 h  
Test Method: static test
- LC 50 (Pimephales promelas (fathead minnow)): 10,800 mg/l  
Exposure time: 48 h  
Test Method: static test
- Toxicity to daphnia and other aquatic invertebrates : LC 50 (Water flea (Ceriodaphnia dubia)): 4,060 mg/l  
Exposure time: 48 h  
Test Method: static test

### Components:

#### **SODIUM SULFITE:**

- Toxicity to fish : LC 50 (Western mosquitofish (Gambusia affinis)): 660 mg/l  
Exposure time: 96 h  
Method: Static  
Mortality
- Toxicity to daphnia and other aquatic invertebrates : LC 50 (Water flea (Daphnia magna)): 273 mg/l  
Exposure time: 50 h  
Method: Static  
Mortality

#### **SODIUM HYDROXIDE:**

- Toxicity to fish : LC 50 (Western mosquitofish (Gambusia affinis)): 125 mg/l  
Exposure time: 96 h  
Method: Static  
Mortality
- Toxicity to daphnia and other aquatic invertebrates : EC 50 (Water flea (Daphnia magna)): 34.59 - 47.13 mg/l  
Exposure time: 48 h  
Intoxication

#### **ORGANIC SALT:**

- Toxicity to fish : LC 50 (Fish): > 1,000 mg/l  
Method: DIN 38412

# ASHLAND

## SAFETY DATA SHEET

Page: 8

Revision Date: 05/30/2013

Print Date: 8/26/2014

MSDS Number: R0300109

Version: 3.8

Amersite™ 11 CORROSION INHIBITOR

™ Trademark, Solenis or its subsidiaries or affiliates,  
registered in various countries 100167

### Persistence and degradability

#### Product:

no data available

#### Components:

##### ORGANIC SALT:

Biodegradability : Biodegradation: 98 %  
Exposure time: 2 d  
Readily biodegradable

Biochemical Oxygen Demand (BOD) : Biochemical oxygen demand within 5 days  
507 mg/g

Chemical Oxygen Demand (COD) : 807 mg/g

##### Bioaccumulative potential

#### Product:

no data available

#### Components:

no data available

##### Mobility in soil

#### Product:

no data available

#### Components:

##### SODIUM HYDROXIDE:

Surface tension : 101.05 mN/m

### 13. DISPOSAL CONSIDERATIONS

#### Waste disposal methods

Dispose of in accordance with all applicable local, state and federal regulations.



# ASHLAND

## SAFETY DATA SHEET

Page: 9

Revision Date: 05/30/2013

Print Date: 8/26/2014

MSDS Number: R0300109

Version: 3.8

Amersite™ 11 CORROSION INHIBITOR  
 ™ Trademark, Solenis or its subsidiaries or affiliates,  
 registered in various countries 100167

### 14. TRANSPORT INFORMATION

#### REGULATION

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.
-----------	----------------------	---------------	--------------------	---------------	------------------------------

#### U.S. DOT - ROAD

UN 3266	Corrosive liquid, basic, inorganic, n.o.s. (SODIUM HYDROXIDE)	8		II	
---------	---	---	--	----	--

#### U.S. DOT - RAIL

UN 3266	Corrosive liquid, basic, inorganic, n.o.s. (SODIUM HYDROXIDE)	8		II	
---------	---	---	--	----	--

#### U.S. DOT - INLAND WATERWAYS

UN 3266	Corrosive liquid, basic, inorganic, n.o.s. (SODIUM HYDROXIDE)	8		II	
---------	---	---	--	----	--

#### TRANSPORT CANADA - ROAD

UN 3266	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE)	8		II	
---------	---	---	--	----	--

#### TRANSPORT CANADA - RAIL

UN 3266	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE)	8		II	
---------	---	---	--	----	--

#### TRANSPORT CANADA - INLAND WATERWAYS

UN 3266	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE)	8		II	
---------	---	---	--	----	--

#### INTERNATIONAL MARITIME DANGEROUS GOODS

UN 3266	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE)	8		II	
---------	---	---	--	----	--

#### INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

UN 3266	Corrosive liquid, basic, inorganic, n.o.s. (SODIUM HYDROXIDE)	8		II	
---------	---	---	--	----	--

#### INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

UN 3266	Corrosive liquid, basic, inorganic, n.o.s. (SODIUM HYDROXIDE)	8		II	
---------	---	---	--	----	--

# ASHLAND

## SAFETY DATA SHEET

Page: 10

Revision Date: 05/30/2013

Print Date: 8/26/2014

MSDS Number: R0300109

Version: 3.8

Amersite™ 11 CORROSION INHIBITOR  
 ™ Trademark, Solenis or its subsidiaries or affiliates,  
 registered in various countries 100167

### MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES

UN	3266	LIQUIDO CORROSIVO, BASICO, 8 INORGANICO, N.E.P. (SODIUM HYDROXIDE)	8	II
----	------	--	---	----

\*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

### 15. REGULATORY INFORMATION

#### California Prop. 65

Proposition 65 warnings are not required for this product based on the results of a risk assessment.

#### SARA Hazard Classification

#### SARA 311/312 Classification

Acute Health Hazard

#### SARA 313 Component(s)

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### Notification status

US. Toxic Substances Control Act	y (positive listing)
Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL). (Can. Gaz. Part II, Vol. 133)	y (positive listing)
Australia. Industrial Chemical (Notification and Assessment) Act	y (positive listing)
New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand	y (positive listing)
Japan. Kashin-Hou Law List	y (positive listing)
Korea. Toxic Chemical Control Law (TCCL) List	y (positive listing)
Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act	y (positive listing)
China. Inventory of Existing Chemical Substances	y (positive listing)

#### Reportable quantity - Product

US. EPA CERCLA Hazardous Substances (40 CFR 302)	29708 lbs
--	-----------

#### Reportable quantity-Components

SODIUM HYDROXIDE	1310-73-2	1000 lbs
------------------	-----------	----------

# ASHLAND

## SAFETY DATA SHEET

Page: 11

Revision Date: 05/30/2013

Print Date: 8/26/2014

MSDS Number: R0300109

Version: 3.8

Amersite™ 11 CORROSION INHIBITOR

™ Trademark, Solenis or its subsidiaries or affiliates,  
registered in various countries100167

	HMIS	NFPA
Health	2	2
Flammability	0	0
Physical hazards	1	
Instability		1
Specific Hazard	--	--

### 16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :

ACGIH : American Conference of Industrial Hygienists

BEI : Biological Exposure Index

CAS : Chemical Abstracts Service (Division of the American Chemical Society).

CMR : Carcinogenic, Mutagenic or Toxic for Reproduction

FG : Food grade

GHS : Globally Harmonized System of Classification and Labeling of Chemicals.

H-statement : Hazard Statement

IATA : International Air Transport Association.

IATA-DGR : Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO : International Civil Aviation Organization

ICAO-TI (ICAO) : Technical Instructions by the "International Civil Aviation Organization"

IMDG : International Maritime Code for Dangerous Goods

ISO : International Organization for Standardization

logPow : octanol-water partition coefficient

LCxx : Lethal Concentration, for xx percent of test population

LDxx : Lethal Dose, for xx percent of test population.

ICxx : Inhibitory Concentration for xx of a substance

Ecxx : Effective Concentration of xx

N.O.S.: Not Otherwise Specified

OECD : Organization for Economic Co-operation and Development

OEL : Occupational Exposure Limit

P-Statement : Precautionary Statement

PBT : Persistent , Bioaccumulative and Toxic

PPE : Personal Protective Equipment

STEL : Short-term exposure limit

STOT : Specific Target Organ Toxicity

TLV : Threshold Limit Value

TWA : Time-weighted average

vPvB : Very Persistent and Very Bioaccumulative

WEL : Workplace Exposure Level

CERCLA : Comprehensive Environmental Response, Compensation, and Liability Act

# ASHLAND

## SAFETY DATA SHEET

Page: 12

Revision Date: 05/30/2013

Print Date: 8/26/2014

MSDS Number: R0300109

Version: 3.8

Amersite™ 11 CORROSION INHIBITOR

™ Trademark, Solenis or its subsidiaries or affiliates,  
registered in various countries100167

DOT : Department of Transportation

FIFRA : Federal Insecticide, Fungicide, and Rodenticide Act

HMIRC : Hazardous Materials Information Review Commission

HMIS : Hazardous Materials Identification System

NFPA : National Fire Protection Association

NIOSH : National Institute for Occupational Safety and Health

OSHA : Occupational Safety and Health Administration

PMRA : Health Canada Pest Management Regulatory Agency

RTK : Right to Know

WHMIS : Workplace Hazardous Materials Information System