



# SAFETY DATA SHEET

Issue Date 01-Dec-2015

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Version 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

### Product identifier

**Product Name** Rust-D NL406

### Other means of identification

**SDS#** JC-013-015

### Details of the supplier of the safety data sheet

**Company Name** Newline Industries LLC  
111 Highline Drive  
Longwood, FL 32750  
407-480-5464

### Emergency telephone number

**Emergency Telephone** INFOTRAC 1-800-535-5053

## 2. HAZARDS IDENTIFICATION

### Classification

#### OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 3
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Corrosive to metals	Category 1

### Label elements

#### Emergency Overview

# Danger

#### Hazard statements

Harmful if swallowed  
Toxic in contact with skin  
Causes severe skin burns and eye damage  
May be corrosive to metals



**Appearance** Clear

**Physical state** Liquid

**Odor** Acidic

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Do not breathe dust/fume/gas/mist/vapors/spray

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 Immediately call a POISON CENTER or doctor/physician  
 Call a POISON CENTER or doctor/physician if you feel unwell  
 Wash contaminated clothing before reuse  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 Immediately call a POISON CENTER or doctor/physician  
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
 Rinse mouth  
 Do NOT induce vomiting

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)****Other Information**

Unknown Acute Toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
Ammonium Fluoride	12125-01-8	3-7	*
Hydrofluoric Acid	7664-39-3	1-5	*
Phosphoric Acid	7664-38-2	1-5	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

### 4. FIRST AID MEASURES

**First aid measures**

<b>General advice</b>	Immediate medical attention is required.
<b>Skin Contact</b>	Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
<b>Eye contact</b>	Keep eye wide open while rinsing. Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Do not rub affected area.
<b>Inhalation</b>	Remove to fresh air. Call a physician or poison control center immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
<b>Ingestion</b>	Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. Immediate medical attention is required. Remove from exposure, lie down. Clean mouth with water and drink afterwards plenty of water. Call a physician or poison control center immediately.

**Self-protection of the first aider** Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** Any additional important symptoms and effects are described in Section 11: Toxicology Information.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** Caution: Use of water spray when fighting fire may be inefficient.

**Specific hazards arising from the chemical**

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating and toxic gases and vapors. In the event of fire and/or explosion do not breathe fumes.

**Explosion data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Use personal protective equipment as required. Evacuate personnel to safe areas. Avoid contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak.

**Environmental precautions**

**Environmental precautions** Do not allow into any sewer, on the ground or into any body of water. Should not be released into the environment. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.

**Methods for cleaning up** Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Prevent product from entering drains. Dam up. After cleaning, flush away traces with water.

## 7. HANDLING AND STORAGE

**Precautions for safe handling****Advice on safe handling**

Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation, especially in confined areas. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems.

**Conditions for safe storage, including any incompatibilities****Storage Conditions**

Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers.

**Incompatible materials**

Incompatible with strong acids and bases. Incompatible with oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters****Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ammonium Fluoride 12125-01-8	TWA: 2.5 mg/m <sup>3</sup> F	TWA: 2.5 mg/m <sup>3</sup> F TWA: 2.5 mg/m <sup>3</sup> dust (vacated) TWA: 2.5 mg/m <sup>3</sup>	TWA: 2.5 mg/m <sup>3</sup> F
Hydrofluoric Acid 7664-39-3	TWA: 0.5 ppm F TWA: 2.5 mg/m <sup>3</sup> F S* Ceiling: 2 ppm F	TWA: 3 ppm F TWA: 2.5 mg/m <sup>3</sup> F TWA: 2.5 mg/m <sup>3</sup> dust (vacated) TWA: 3 ppm F (vacated) TWA: 2.5 mg/m <sup>3</sup> (vacated) STEL: 6 ppm F	IDLH: 30 ppm Ceiling: 6 ppm 15 min Ceiling: 5 mg/m <sup>3</sup> 15 min TWA: 3 ppm TWA: 2.5 mg/m <sup>3</sup>
Phosphoric Acid 7664-38-2	STEL: 3 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup> (vacated) TWA: 1 mg/m <sup>3</sup> (vacated) STEL: 3 mg/m <sup>3</sup>	IDLH: 1000 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup> STEL: 3 mg/m <sup>3</sup>

NIOSH IDLH *Immediately Dangerous to Life or Health*

**Other Information**

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

**Appropriate engineering controls****Engineering Controls**

Showers, Eyewash stations & Ventilation systems.

**Individual protection measures, such as personal protective equipment****Eye/face protection**

Tight sealing safety goggles. Face protection shield.

**Skin and body protection**

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

**Respiratory protection**

Ensure adequate ventilation, especially in confined areas. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators or air purifying respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene**

When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Keep away from food, drink and animal feeding stuffs. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Take off all contaminated clothing and wash it before reuse. Wear suitable gloves and eye/face protection.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

Physical state	Liquid
Appearance	Clear
Color	Colorless
Odor	Acidic
Odor threshold	No Information available

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>
pH	<1	
Specific Gravity	1.01	
Viscosity	<25 cP @ 25°C	
Melting point/freezing point	No Information available	
Flash point	None	
Boiling point / boiling range	>=212 ° F	
Evaporation rate	No Information available	
Flammability (solid, gas)	No data available	
Flammability Limits in Air		
Upper flammability limit:	No Information available	
Lower flammability limit:	No Information available	
Vapor pressure	No Information available	
Vapor density	No Information available	
Water solubility	Complete	
Partition coefficient	No Information available	
Autoignition temperature	No Information available	
Decomposition temperature	No Information available	

**Other Information**

Density Lbs/Gal	8.42
VOC Content (%)	Not Applicable

**10. STABILITY AND REACTIVITY****Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Exposure to air or moisture over prolonged periods.

**Incompatible materials**

Incompatible with strong acids and bases. Incompatible with oxidizing agents.

**Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure**

<b>Product Information</b>	Harmful by inhalation, ingestion, in contact with eyes and skin.
<b>Inhalation</b>	Avoid breathing vapors or mists. Breathing of vapor can cause respiratory irritation and inflammation. Breathing of mist or liquid can cause burns to the respiratory tract.

<b>Eye contact</b>	Avoid contact with eyes. Corrosive to the eyes and may cause severe damage including blindness.
<b>Skin Contact</b>	Toxic in contact with skin. Corrosive. Contact with skin may cause severe irritation and burns.
<b>Ingestion</b>	Harmful if swallowed. May be fatal if swallowed. Can burn mouth, throat, and stomach. Ingestion causes acute irritation and burns to the mucous membranes of the mouth, trachea, esophagus and stomach.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Hydrofluoric Acid 7664-39-3	-	-	= 0.79 mg/L ( Rat ) 1 h
Phosphoric Acid 7664-38-2	= 1530 mg/kg ( Rat )	= 2740 mg/kg ( Rabbit )	> 850 mg/m <sup>3</sup> ( Rat ) 1 h

### Information on toxicological effects

**Symptoms** No Information available.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Sensitization** No Information available.

**Germ cell mutagenicity** No Information available.

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Ammonium Fluoride 12125-01-8	-	Group 3	-	-

**IARC (International Agency for Research on Cancer)**

*Group 3 -Not classifiable as a human carcinogen*

**Reproductive toxicity** No Information available.

**STOT - single exposure** No Information available.

**STOT - repeated exposure** No Information available.

**Chronic toxicity**

Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Avoid repeated exposure. Possible risk of irreversible effects.

**Target organ effects**

EYES, Respiratory system, Skin.

**Aspiration hazard**

No Information available.

### Numerical measures of toxicity - Product Information

**Unknown Acute Toxicity** 0% of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

<b>ATEmix (oral)</b>	661.00 mg/kg
<b>ATEmix (dermal)</b>	728.00 mg/kg
<b>ATEmix (inhalation-gas)</b>	55,883.15 mg/l
<b>ATEmix (inhalation-dust/mist)</b>	5.48 mg/l

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Ammonium Fluoride 12125-01-8	-	364.0: 96 h Pimephales promelas mg/L LC50 static	-
Hydrofluoric Acid	-	660: 48 h Leuciscus idus mg/L LC50	270: 48 h Daphnia species mg/L

7664-39-3			EC50
Phosphoric Acid 7664-38-2	-	3 - 3.5: 96 h <i>Gambusia affinis</i> mg/L LC50	4.6: 12 h <i>Daphnia magna</i> mg/L EC50

**Persistence and degradability**

No Information available.

**Bioaccumulation**

Bioaccumulative potential.

Chemical Name	Partition coefficient
Hydrofluoric Acid 7664-39-3	-1.4

**Other adverse effects**

No Information available

**13. DISPOSAL CONSIDERATIONS****Waste treatment methods****Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging**

Do not reuse container.

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Hydrofluoric Acid 7664-39-3	U134	-	-	U134

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Ammonium Fluoride 12125-01-8	Toxic Corrosive
Phosphoric Acid 7664-38-2	Corrosive

**14. TRANSPORT INFORMATION**

The basic description below is specific to the container size. This information is provided for at a glance DOT information. Please refer to the container and/or shipping papers for the appropriate shipping description before tendering this material for shipment. For additional information, please contact the distributor listed in section 1 of this SDS.

**DOT**

UN/ID No. UN2922  
 Proper shipping name Corrosive liquids, toxic, n.o.s.  
 Hazard Class 8  
 Subsidiary class 6.1  
 Packing Group III  
 Special Provisions IB3, T7, TP1, TP28  
 Description UN2922, Corrosive liquids, toxic, n.o.s. (contains Ammonium Bifluoride), 8, 6.1, III  
 Emergency Response Guide Number 154

**TDG**

UN/ID No. UN2922  
 Proper shipping name Corrosive liquids, toxic, n.o.s.  
 Hazard Class 8  
 Subsidiary class 6.1

**Packing Group** III  
**Description** UN2922, Corrosive liquids, toxic, n.o.s. (contains Ammonium Bifluoride), 8, 6.1, III

### 15. REGULATORY INFORMATION

#### International Inventories

**TSCA** Complies  
**DSL/NDSL** Complies

#### Legend:

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

#### US Federal Regulations

##### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
Ammonium Fluoride - 12125-01-8	1.0
Hydrofluoric Acid - 7664-39-3	1.0

##### SARA 311/312 Hazard Categories

**Acute health hazard** Yes  
**Chronic Health Hazard** Yes  
**Fire hazard** No  
**Sudden release of pressure hazard** No  
**Reactive Hazard** No

##### CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Ammonium Fluoride 12125-01-8	100 lb	-	-	X
Hydrofluoric Acid 7664-39-3	100 lb	-	-	X
Phosphoric Acid 7664-38-2	5000 lb	-	-	X

##### CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Ammonium Fluoride 12125-01-8	100 lb	-	RQ 100 lb final RQ RQ 45.4 kg final RQ
Hydrofluoric Acid 7664-39-3	100 lb	100 lb	RQ 100 lb final RQ RQ 45.4 kg final RQ
Phosphoric Acid 7664-38-2	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

#### US State Regulations

##### California Proposition 65

This product does not contain any Proposition 65 chemicals

#### U.S. State Right-to-Know Regulations



Chemical Name	New Jersey	Massachusetts	Pennsylvania
Ammonium Fluoride 12125-01-8	X	X	X
Hydrofluoric Acid 7664-39-3	X	X	X
Phosphoric Acid 7664-38-2	X	X	X

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not Applicable

**16. OTHER INFORMATION**

<b><u>NFPA</u></b>	Health hazards 3	Flammability 0	Instability 0	Physical and Chemical Properties Yes
<b><u>HMIS</u></b>	Health hazards 3	Flammability 0	Physical hazards 0	Personal protection C

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**Revision Note**

No Information available

**Disclaimer**

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.

**End of Safety Data Sheet**