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# **SAFETY DATA SHEET**

# **Rust Remover III**

# 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

## **Product Identification**

Product Name: Rust Remover III

Product Number: C193 CAS Number: Blend

#### **Company Identification**

Chem-Dry New Zealand LTD 108 Kelfield Place Hastings,New Zealand 0800 24 36 37 Chem-Dry New Zealand LTD (For product information)



# 2. HAZARDS IDENTIFICATION

#### **SIGNAL WORD:**

Danger.

#### **GHS Classification:**

Acute Toxicity, Oral - Category 3
Skin Corrosion/Irritation - Category 1B

#### **GHS Hazard Symbols:**

Corrosive, Toxic, Health Hazard







#### **GHS Hazard Statements:**

H290 - May be corrosive to metals.

H301 - Toxic if swallowed.

H314 - Causes severe skin burns and eye damage.

H318 - Causes serious eye damage.

#### EYE:

Causes eye irritation. May be extremely irritating with possible burns to eye tissue and permanent eye damage may result.

#### SKIN

Causes irritation and burns to the skin. Effects may not appear immediately.

#### INHALATION:



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May cause irritation and burns to the respiratory tract. May be absorbed through inhalation of dust. Irritation and burning effects may not appear immediately.

#### **INGESTION:**

May cause brain and kidney damage. Affects heart and circulatory system. Death may be caused by respiratory paralysis. Lethal dose between 1 teaspoonful and 1 oz.

#### **CHRONIC EFFECTS:**

Chronic exposure may cause mottling of teeth and bone damage (osteosclerosis) and fluorosis.

#### MEDICAL CONDITIONS AGRAVATED BY EXPOSURE:

Populations that appear to be at increased risk from the effects of flouride are individuals that suffer from diabetes insipidus or some forms of renal impairment.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

**COMPONENT LISTING:** 

| Chemical Name              | Amount        | CAS Number |
|----------------------------|---------------|------------|
| AMMONIUM BIFLUORIDE        | 90.0 - 99.0 % | 1341-49-7  |
| AMMONIUM FLUORIDE ((NH4)F) | 1.0 - 5.0 %   | 12125-01-8 |

# 4. FIRST AID MEASURES

#### MISCELLANEOUS:

If inhaled or swallowed, this compound can cause fluoride poisoning. Early symptoms include nausea, vomiting, diarrhea, and weakness. Later effects include central nervous system effects, cardiovascular effects and death.

#### **EYE CONTACT FIRST AID:**

Immediately flush eyes with plenty of water for at least 15 minutes.

Get immediate medical attention.

#### SKIN CONTACT FIRST AID:

Immediately wash skin with soap and plenty of water.

Remove contaminated clothing and shoes.

Wash clothing before reuse.

CALL A PHYSICIAN IMMEDIATELY.

#### **INHALATION FIRST AID:**

If inhaled, remove to fresh air.

If breathing is difficult, give oxygen.

CALL A PHYSICIAN IMMEDIATELY.

#### **INGESTION FIRST AID:**

Give large quantities of milk or water with milk of magnesia to dilute.

Never give anything by mouth to an unconscious person.

Do not induce vomiting.



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CALL A PHYSICIAN IMMEDIATELY.

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# 5. FIRE FIGHTING MEASURES

#### **NOTES TO PHYSICIAN:**

For large exposures, systemic effects (hypocalcemia and hypomagnesia) may occur.

#### FLAMMABLE PROPERTIES

COC Flash Point: N/A

Autoignition Temperature: N/A

#### FLAMMABLE LIMITS IN AIR

LEL: N/A UEL: N/A

#### **EXTINGUISHING MEDIA:**

Use dry chemicals to fight fire.

Do not use water.

#### FIRE & EXPLOSION HAZARDS:

Contact with water and metal at the same time may evolve flammable hydrogen gas.

## 6. ACCIDENTAL RELEASE MEASURES

#### SAFEGUARDS (PERSONNEL):

Ventilate spill area.

Protect skin and eyes from exposure.

Wear appropriate personal protective equipment.

### **INITIAL CONTAINMENT:**

Ventilate area.

Take up and place in secure closed containers.

# 7. HANDLING AND STORAGE

#### HANDLING (PERSONNEL):

Do not breathe (dust, vapor, mist, gas).

Avoid contact with skin and eyes.

Do not handle in a manner that creates excessive dust.

Use with adequate ventilation.

#### HANDLING (PHYSICAL ASPECTS):

Secure container after each use.

#### STORAGE PRECAUTIONS:

Keep container tightly closed.



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# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### **MISCELLANEOUS:**

Separate from acids and alkalis.

Do not store in metal containers, as contact with moisture and metal at the same time may release flammable hydrogen gas.

Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

#### **EYE / FACE PROTECTION REQUIREMENTS:**

Chemical goggles and/or face shield are recommended to avoid contact with eyes.

#### **SKIN PROTECTION REQUIREMENTS:**

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

#### **EXPOSURE GUIDELINES:**

No Information Available.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

FORM: Solid COLOR: White ODOR: No odor

SOLUBILITY IN WATER: 41.5g/100g Water @ 25C (68F)

PH: 3.5 (5% solution)

VOLATILE ORGANIC COMPOUNDS (VOC): <1%

## 10. STABILITY AND REACTIVITY

#### STABILITY:

Stable under ordinary conditions of use and storage.

#### **POLYMERIZATION:**

Will not occur.

#### **INCOMPATIBILITY WITH OTHER MATERIALS:**

Reacts with acids to liberate hydrogen fluoride and base to liberate ammonia. When combined with moisture, will corrode glass, cement and most metals.

#### **DECOMPOSITION:**

Emits toxic fumes of hydrogen fluoride, nitric oxides, and ammonia when heated to decomposition. Upon contact with moisture and metal, this material may release hydrogen gas.

# 11. TOXICOLOGICAL INFORMATION

No information available.

# 12. ECOLOGICAL INFORMATION



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#### ammonium bifluoride

Test Code: Oral LD50 Species: Rat Results: 129 mg/kg

#### **ENVIRONMENTAL FATE:**

This material is not expected to significantly bioaccumulate. When released into water, this material may biodegrade to a moderate extent.

# 13. DISPOSAL CONSIDERATIONS

#### ammonium bifluoride

Test Code: Acute Aquatic Toxicity (96 hr.)

Species: Fish Results: >100 mg/L

#### WASTE DISPOSAL:

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility.

## 14. TRANSPORT INFORMATION

PRODUCT LABEL: Rust Remover III
D.O.T. SHIPPING NAME: Consumer commodity

D.O.T. HAZARD CLASS: ORM-D ID NUMBER: ID8000

D.O.T. LABEL: Consumer Commodity/ ORM-D

## 15. REGULATORY INFORMATION

#### **MISCELLANEOUS:**

See 49 CFR 173.154(c).

IATA Shipping Classification: UN1727, Ammonium hydrogendifluoride, solid, 8, II, Limited Quantity.

IMO/IMDG Shipping Classification: UN1727, Ammonium hydrogendifluoride, solid, 8, II, Limited Quantity.

Note: Limited quantity exception for inner packagings not exceeding 15.0 kg of product.

#### **REGULATORY LISTS SEARCHED:**

01 = SARA TITLE III SECTION 302 03 = RCRA HAZARDOUS WASTE CODES 05 = CLEAN AIR ACT 02 = SARA Title III Section 313 04 = CERCLA Hazardous Substances 06 = California Prop. 65

#### **GHS Precautionary Statements:**

P260 - Do not breathe dust/fume/gas/mist/vapors/spray.

P264 - Wash hands, forearms, and exposed areas thoroughly after handling.

P270 - Do no eat, drink or smoke when using this product.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P301/330/331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P301/310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P303/361/353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305/351/338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.



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P390 - Absorb spillage to prevent material damage.

P405 - Store locked up.

P406 - Store in corrosive resistant container with a resistant inner liner.

P501 - Dispose of contents/container to comply with local, regional, national, and international regulations.

#### **EEC Symbols and Indications of Danger:**

Toxic (T), Corrosive (C)





#### R-Phrases:

R25 - Toxic if swallowed.

R34 - Causes burns.

#### S-Phrases:

S22 - Do not breathe dust.

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S36/37/39 - Wear suitable protective clothing, gloves, and eye/face protection.

\$1/2 - Keep locked up and out of the reach of children.

#### WHMIS Hazard Symbols:

Class D2 - Materials Causing Other Toxic Effects, Class E - Corrosive Material





#### SARA Title III - Section 313

Rust Remover III (BLEND) --

#### **CERCLA Hazardous Substances**

Rust Remover III (BLEND) -- ammonium bifluoride (1341-49-7) -- RQ 100 lb AMMONIUM FLUORIDE ((NH4)F) (12125-01-8) -- RQ 100 lb

# 16. OTHER INFORMATION

#### **MISCELLANEOUS INFORMATION:**

This material or all of its components are listed on the Inventory of Existing Chemical Substances under the Toxic Substance Control Act (TSCA).

PREPARED BY: Sterling Nesbit
APPROVED BY: Sterling Nesbit
TITLE: Chemist

APPROVAL DATE: August 17, 2018
SUPERCEDES DATE: November 3, 2015
RTN NUMBER: 00000027 (Official Copy)

#### **HMIS Rating:**



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|--|------------------|
| Llaalth 2  |                  |
| nealth - 3   |                  |
| Flammability - U                                   |                  |
| Health - 3<br>Flammability - 0<br>Reactivity - 0   |                  |
| NFPA Rating:                                       |                  |
| Health -   | 3                |
| Flammability -<br>Reactivity -<br>Special Hazard - | 0                |
| Describits   | 0                |
| Reactivity -                                       |                  |
| Special Hazard -                                   | Corrosive        |
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