

# MATERIAL SAFETY DATA SHEET



## Divercid

HMIS		NFPA	Personal protective equipment			
Health	3	3				
Fire Hazard	0	0				
Reactivity	0	0				

Version Number: 2

Preparation date: 2005-05-20

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name:** Divercid

**MSDS #:** 267900609001

**Product code:** 267900609001, 3418859, 3418867, 3418875

**Recommended use:** Laundry care.

**Manufacturer, importer, supplier:**  
 US Headquarters: Canadian Headquarters  
 JohnsonDiversey, Inc. JohnsonDiversey - Canada, Inc.  
 8310 16th St. 2401 Bristol Circle  
 Sturtevant, Wisconsin 53177-0902 Oakville, Ontario L6H 6P1  
 Phone: 1-888-352-2249 Phone: 1-800-668-3131  
 MSDS Internet Address:  
 www.johnsondiversev.com

**Emergency telephone number:** 1-800-851-7145 (Prosar); 1-651-917-6133 (Int'l Prosar); 01-800-710-3400 (México)

### 2. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

**DANGER. CORROSIVE. MAY BE HARMFUL IF ABSORBED THROUGH SKIN. HARMFUL IF SWALLOWED OR INHALED.** FIRST AID: Responders should put on appropriate personal protective equipment (goggles & gloves) to protect themselves before assisting victims. Burns may not be immediately obvious or painful. Can cause hypocalcemia resulting in possibly fatal, delayed ventricular fibrillation.

**Principle routes of exposure:** Eyes. Skin. Inhalation. Ingestion.

**Skin contact:** Corrosive. May cause permanent damage. Also very toxic in contact with skin.

**Eye contact:** Corrosive. Causes permanent eye damage, including blindness.

**Inhalation:** May cause irritation and corrosive effects to nose, throat and respiratory tract.

**Ingestion:** Causes burns to mouth, throat and stomach. If ingested, ammonium bifluoride may disrupt the body's electrolyte balance by binding essential metal ions such as magnesium and calcium (hypocalcemia) which may disrupt normal heart and nervous system functions. Disruptions to the body's potassium balance (hyperkalemia) may also occur. Effects may appear immediately or be delayed as much as 4 hours after exposure. Death usually results from uncontrollable ventricular fibrillation. Intravenous calcium chloride or gluconate may be indicated to prevent hypocalcemia. Consultation with a medical toxicologist is advised.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### HAZARDOUS COMPONENTS

Ingredient	CAS #	Weight %	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ammonium bifluoride	1341-49-7	10 - 20%	Not available	Not available	Not available
Hydrofluoric acid	7664-39-3	1 - 5%	15.2 mg/kg (rat)	Not available	1276 ppm/1H (rat)

### 4. FIRST AID MEASURES

**Eye contact:** Immediately flush eyes for 15 minutes with flowing water. Take the victim to a physician as soon as possible. If possible, apply ice water compresses during transport.

**Skin contact:** Responders should put on appropriate personal protective equipment to protect themselves before assisting victims. Immediately remove all contaminated clothing. Immediately flush the affected area for five minutes with large amounts of water. While the victim is being rinsed with water, have someone call to arrange medical treatment. If the exposure is to the eyes face, groin, or covers a large area, call 911. For smaller exposure, (i.e. A few drops on the skin), call a physician or poison control center. Immediately after flushing with water start massaging 2.5% calcium glucagon gel into the burn site. Responders must wear gloves when applying the gel to prevent secondary HF burns to their hands. Apply the gel every 15 minutes and massage until pain/redness ceases or professional medical care is available.

**Inhalation:** Immediately move the victim to fresh air. Call 911. Inhalation of HF fumes may cause swelling in the respiratory tract up to 24 hours after exposure. Persons who have inhaled HF fumes may need prophylactic oxygen treatment and should be seen by a physician as soon as possible.

**Ingestion:** DO NOT induce vomiting. If able to swallow, offer sips of water or milk. GET MEDICAL ATTENTION IMMEDIATELY. Never give anything by mouth to an unconscious person.

**Aggravated Medical Conditions:** Persons with pre-existing skin disorders may be more susceptible to irritating effects

## 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media:** The product is not flammable. Dry chemical, water spray, foam, carbon dioxide.

**Specific hazards:** Thermal decomposition can lead to release of irritating gases and vapors.

**Unusual hazards:** Corrosive material (See sections 8 and 10).

**Specific methods:** No special methods required.

**Autoignition temperature:** No information available.

**Special protective equipment for firefighters:** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

**Extinguishing media which must not be used for safety reasons:** No information available

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Put on appropriate personal protective equipment (see Section 8.).

**Environmental precautions and clean-up methods:** Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Use a water rinse for final clean-up.

## 7. HANDLING AND STORAGE

**Handling:** Avoid contact with skin, eyes and clothing. Do not taste or swallow. Avoid breathing vapors or mists. Use only with adequate ventilation. Remove and wash contaminated clothing and footwear before re-use. Wash thoroughly after handling. Product residue may remain on/in empty containers. All precautions for handling the product must be used in handling the empty container and residue. FOR COMMERCIAL AND INDUSTRIAL USE ONLY.

**Storage:** Protect from freezing . Keep tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering measures to reduce exposure:** General room ventilation is adequate.

### Personal Protective Equipment

**Eye protection:** Chemical splash goggles.

**Hand protection:** Chemical resistant gloves. Includes. rubber gloves.

**Skin and body protection:** If major exposure is possible, wear suitable protective clothing and footwear.

**Respiratory protection:** No special requirements under normal use conditions. In case of insufficient ventilation wear suitable respiratory equipment.

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety practice . Keep away from food, drink and animal feeding stuffs . Avoid contact with skin, eyes and clothing .

Ingredient	CAS #	ACGIH	OSHA	Mexico
Ammonium bifluoride	1341-49-7	2.5 mg/m <sup>3</sup> (TWA)	2.5 mg/m <sup>3</sup> F <sub>-</sub>	2.5 mg/m <sup>3</sup> (TWA)
Hydrofluoric acid	7664-39-3	2 ppm (Ceiling) 0.5 ppm (TWA) 2.5 mg/m <sup>3</sup> (TWA)	2.5 mg/m <sup>3</sup> F <sub>-</sub>	2.5 mg/m <sup>3</sup> (Ceiling) 2.5 mg/m <sup>3</sup> (TWA)

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State:</b> Liquid	<b>Appearance:</b> Liquid
<b>Color:</b> Clear to Hazy	<b>Boiling point/range:</b> Not determined
<b>Odor:</b> Odorless	<b>Melting point/range:</b> Not determined
<b>Specific gravity:</b> 1.050	<b>pH:</b> 3.75
<b>Dilution pH:</b> 3.9 (1%)	<b>Density:</b> 1.050
<b>Bulk density:</b> No information available	<b>Decomposition temperature:</b> Not determined
<b>Vapor density:</b> No information available	<b>Autoignition temperature:</b> No information available
<b>Evaporation rate:</b> No information available	<b>Solubility:</b> Soluble
<b>Solubility in other solvents:</b> No information available	<b>VOC:</b> 0
<b>Viscosity:</b> No information available	<b>Flash point:</b> >200 (°F) >93.3 (°C)
<b>Partition coefficient (n-octanol/water):</b> No information available	

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	The product is stable
<b>Polymerization:</b>	Hazardous polymerisation does not occur
<b>Hazardous decomposition products:</b>	None reasonably foreseeable
<b>Materials to avoid:</b>	Acids.
<b>Conditions to avoid:</b>	Do not freeze.

## 11. TOXICOLOGICAL INFORMATION

<b>Component Information:</b>	See Section 3
<b>Chronic toxicity:</b>	Repeated exposure to high levels of fluoride through ingestion, inhalation, [or dermal absorption- if posing a skin absorption hazard] can cause fluorosis. The primary target is the skeletal system. Effects can include osteoporosis, increased bone density, mottled tooth enamel, and calcification of ligaments .

### Specific effects

<b>Carcinogenic effects:</b>	None known
<b>Mutagenic effects:</b>	None known
<b>Reproductive toxicity:</b>	None known
<b>Target organ effects:</b>	Hydrofluoric Acid (HF) readily penetrates skin, allowing it to destroy soft tissues and decalcify bone. Acute effects of exposure to concentrated (>5%) HF include severe pain, respiratory irritation, severe eye damage, and pulmonary edema. Exposure to less concentrated solutions may have equally serious but delayed effects. Even though HF is chemically defined as a "weak" acid it has a considerable ability to cause severe tissue damage and death. A splash of HF to more than 25% of the body can be fatal and requires immediate medical attention. Death has been reported from contact with strong HF solutions (>50%) to as little as 10% of the body's surface area HF spills contacting the eyes, face, groin and large surface areas of the body require immediate medical attention. .

## 12. ECOLOGICAL INFORMATION

<b>Environmental Information:</b>	When used for its intended purpose this product should not cause adverse effects in the environment
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## 13. DISPOSAL CONSIDERATIONS

<b>Waste from residues / unused products:</b>	Dispose of according to all federal, state and local applicable regulations
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## 14. TRANSPORT INFORMATION

<b>DOT/TDG:</b>	Please refer to the Bill of Lading/receiving documents for up to date shipping information
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## 15. REGULATORY INFORMATION

### International Inventories

All components of this product are listed on the following inventories: U.S.A. (TSCA), Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Australia (AICS), Korea (ECL), Japan (ENCS), Philippines (PICCS), China (IECSC).

### U.S. Regulations

**California Proposition 65:** This product is not subject to the reporting requirements under California's Proposition 65

### STATE RIGHT TO KNOW

Ingredient	CAS #	MARTK:	NJRTK:	PARTK:	RIRTK:	ILRTK:	CTRK:
Water	7732-18-5	-	-	-	-	-	-
Ammonium bifluoride	1341-49-7	Listed	Listed	Listed	Listed	Listed	Listed
Hydrofluoric acid	7664-39-3	Listed	-	-	-	Listed	-

### CERCLA / SARA

Ingredient	CAS #	Weight %	CERCLA/SARA RQ (lbs)	Section 302 TPQ (lbs)	Section 313
Ammonium bifluoride	1341-49-7	10 - 20%	100		
Hydrofluoric acid	7664-39-3	1 - 5%	100	100	Listed.

### CAA HAP/CAA ODS/CWA Priority Pollutants: None

Ingredient	CAA HAP	CAA ODS	CWA Priority Pollutants
Hydrofluoric acid	Listed.		

### Canada

**WHMIS hazard class:** E Corrosive material , D1A Very toxic materials .



Ingredient	CAS #	NPRI
Hydrofluoric acid	7664-39-3	Listed

## 16. OTHER INFORMATION

**Reason for revision:** Not applicable  
**Prepared by:** NAPRAC  
**Additional advice:** None

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