

BRADY INDUSTRIES, LLC MATERIAL SAFETY DATA SHEET
PRODUCT: BRADY LAUNDRY SOUR PLUS
Page 1 of 4

MSDS Date: July 25, 2011
Emergency Contact: 1-800-424-9300

SECTION I

PRODUCT NAME: Brady Laundry Sour Plus
CHEMICAL NAME: Hydrofluorosilicic Acid

DOT SHIPPING INFORMATION: Fluorosilicic Acid, 8, UN1778, PG II

SECTION II - HAZARDOUS INGREDIENTS

This material contains no ingredients which are known by Brady Industries, LLC to be hazardous unless listed below.

HAZARDOUS MATERIAL	CAS NUMBER	w/w %	EXPOSURE LIMITS IN AIR
Hydrofluorosilicic Acid	16961-83-4	23-28%	N/D

The specific identity of some ingredients may be withheld for confidential business purposes. However, all known potential health effects from exposure to these ingredients are being addressed.

SECTION III - HEALTH HAZARD DATA

NFPA HAZARD RATING

Health = 3
Flammability = 0
Reactivity = 1

Carcinogenic Listing:

NTP: No Components listed.

IARC MONOGRAPHS: No Components listed.

OSHA 29 CFR 1910: No Components listed.

ENTRY ROUTES & EFFECTS OF OVEREXPOSURE:

Contact Eyes: Corrosive, may cause severe irritation, burns, and permanent eye damage.
Skin: Corrosive, may cause severe irritation, burns, and permanent skin damage.

Inhalation Corrosive. Harmful if inhaled. May cause severe irritation and burns to nose, throat and respiratory tract.

Ingestion Corrosive. Harmful or fatal if swallowed. May cause severe irritation and burns to mouth, throat and digestive tract.

BRADY INDUSTRIES, LLC MATERIAL SAFETY DATA SHEET
PRODUCT: BRADY LAUNDRY SOUR PLUS
Page 2 of 4

STATEMENT OF PRACTICAL TREATMENT:

Contact	Eyes: Flush for at least 15 minutes with cool water. Obtain medical attention. Skin: Wash exposed area thoroughly with soap and water. If irritation persists, obtain medical attention.
Inhalation	Move to fresh air. Administer oxygen. Treat symptomatically. Obtain medical attention. Observe for possible delayed reaction.
Ingestion	Do not induce vomiting. Give large quantities of milk or water if patient is conscious. Obtain medical attention.

SECTION IV - FIRE AND EXPLOSION DATA

FLASH POINT:

N/A

EXPLOSION:

N/A

FLAMMABLE LIMITS:

UEL: N/A

LEL: N/A

EXTINGUISHING MEDIA:

Use any media appropriate for surrounding fire.

SPECIAL FIRE-FIGHTING PROCEDURES:

Fluorosilicic Acid is not flammable, however when heated to decomposition, highly toxic and corrosive fumes of fluorides are emitted. May generate flammable and explosive hydrogen gas in contact with some metals.

SECTION V - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:

Wear NIOSH approved respiratory protective equipment when vapor or mists may exceed applicable concentration limits.

VENTILATION:

Investigate engineering techniques to reduce exposures. Provide ventilation if necessary to control exposure levels below airborne exposure limits. Dilution ventilation acceptable, but local mechanical exhaust ventilation preferred, if practical, at sources of air contamination such as open process equipment. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems. Monitor carbon monoxide and oxygen levels in tank and enclosed spaces.

EYE PROTECTION:

Splash proof goggles and full-face shield should be worn at all times.

BRADY INDUSTRIES, LLC MATERIAL SAFETY DATA SHEET
PRODUCT: BRADY LAUNDRY SOUR PLUS
Page 3 of 4

SKIN PROTECTION:

Acid proof gloves, headgear, protective shoes and clothing should be worn to prevent contact.

OTHER PROTECTIVE EQUIPMENT:

Facilities utilizing or storing this material should be equipped with an eyewash station and a safety shower.

SECTION VI - SPECIAL PRECAUTIONS

HANDLING AND STORAGE PRECAUTIONS:

Avoid contact with skin and eyes. Do not take internally. Store in a cool, dry area. Keep containers tightly closed. Keep out of reach of children.

SECTION VII - PHYSICAL DATA

MELTING POINT C (F):	N/D	BOILING POINT C (F):	105C (222F)
DENSITY:	1.2	VAPOR PRESSURE (mmHg):	N/D
pH:	1.2	EVAPORATION RATE:	N/D
APPEARANCE AND ODOR:	Water white to amber liquid.		

SECTION VIII - REACTIVITY DATA

STABILITY:

Stable under recommended conditions of storage, handling and proper use.

HAZARDOUS POLYMERIZATION:

Will not occur.

CONDITIONS OR MATERIALS TO AVOID:

Avoid all heat sources. Avoid contact with metals, stoneware, strong acids and alkalies, explosives, toxicants, readily oxidizable materials, alkali metals, combustible solids, and organic peroxides.

HAZARDOUS DECOMPOSITION PRODUCTS:

Extreme temperatures such as a fire cause formation of highly toxic and corrosive fumes of fluorides such as SiF₄ and HF. Hydrogen gas may be formed at temperatures above 227°F.

SECTION IX - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL SPILLS OR LEAKS:

Small spills: Contain spill and stop leak if it can be done without risk. Neutralize acid spill using sodium carbonate or a mixture of soda ash and slaked lime. Absorb material with sand or vermiculite or inert absorbent material. Place in DOT-approved poly container and dispose of properly.

Large spills: Isolate spill area and deny entry. Prevent discharge into waterways and sewers. If possible transfer material to appropriate containers for reclamation or disposal. Remaining spill may be neutralized with sodium carbonate or a mixture of soda ash and slaked lime. Contact proper local, state, or federal regulatory agencies to ascertain proper disposal techniques and procedures. All waste to be collected in a

BRADY INDUSTRIES, LLC MATERIAL SAFETY DATA SHEET
PRODUCT: BRADY LAUNDRY SOUR PLUS
Page 4 of 4

DOT-approved poly drum for disposal.

WASTE DISPOSAL METHOD:

This material, if discarded in the same state as it was delivered, meets RCRA Hazardous Waste characteristic for Corrosivity (D002) See 40CFR261.22. Keep in covered DOT-approved container pending disposal. Handle and dispose in full compliance with all applicable International, Federal, State and Local regulations.

ACGIH = American Conference of Governmental Industrial Hygienists

CL = Ceiling Level

IARC = International Agency for Research on Cancer: Monographs

OSHA = Occupational Safety and Health Administration

N/D = Not Determined

N/A = Not Applicable

NTP = National Toxicology Program: Annual Report on Carcinogens

PEL = Permissible Exposure Level (OSHA)

TLV = Threshold Limit Value (ACGIH)

TWA = Time Weighted Average over 8 Hours

This information is, to the best of our knowledge, accurate but may not be complete. BRADY INDUSTRIES, LLC furnishes this information in good faith, but without warranty, representation or guarantee of its accuracy, completeness, or reliability.