



Safety Data Sheet

According to Regulation (EC) No. 1907/2006
OSHA Regulation 29 CFR 1910.1200
Canadian Regulation SOR/88-66

Revision Date: 2012-05-31
Reason for Revision: Section 14 Updated

SECTION 1: IDENTIFICATION OF THE PRODUCT AND COMPANY

Product Name: Extraction Solution

Application: Extraction Solution

Company Information (USA):

Hanna Instruments, Inc.
584 Park East Dr, Woonsocket, Rhode Island, USA 02895

Technical Service Contact Information:

1-800-426-6287 (8:30AM - 5:00PM ET)
+1-401-766-4260 (8:30AM - 5:00PM ET)

USA Emergency Contact Information:

1-800-424-9300 (Chemtrec 24Hr. Emergency)

International Emergency Contact Information:

+1-703-527-3887 (Chemtrec 24Hr. Emergency)

E-mail Address:

tech@hannainst.com

SECTION 2: HAZARD IDENTIFICATION

Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system and skin.

SECTION 3: COMPOSITION AND COMPONENT INFORMATION

Component: Hydrofluoric Acid

EC-No.: 231-634-8

CAS-No.: 7664-39-3

Hazard: T+; C

Phrases: R: 26/27/28-35

Content: > 0.5% - < 1.0%

SECTION 4: FIRST AID MEASURES

After Inhalation: If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

After Skin Contact: In case of contact, immediately wash skin with soap and copious amounts of water.

After Eye Contact: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

After Swallowing: If swallowed, wash out mouth with water provided person is conscious. Call a physician.

General Information: Not available

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:

Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

Special Risks:

Emits toxic fumes under fire conditions.

Special Protective Equipment:

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Additional Information:

NA

Safety Data Sheet

According to Regulation (EC) No. 1907/2006
OSHA Regulation 29 CFR 1910.1200
Canadian Regulation SOR/88-66

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

Environmental Precautions:

Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

Additional Notes:

None

SECTION 7: HANDLING AND STORAGE

Handling:

Do not breathe vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

Storage:

Keep tightly closed.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Type	Value	Source	Type	Value	Source
Hydrofluoric Acid					
Ceiling	1.5 mg/m ³	Belgium	TWA (8hr)	0.5 ppm (as F)	Canada (Ontario)
Ceiling	2.6 mg (F)/m ³	Canada (Quebec)	TWA (8hr)	1.5 mg/m ³	France
TWA (8hr)	0.83 mg/m ³	Germany	TWA (8hr)	2.5 mg/m ³	Greece
TWA (8hr)	1.5 mg/m ³	Hungary	TWA (8hr)	1.5 mg/m ³	Italy
TWA (15min)	1 mg (F)/m ³	Netherlands	TWA (8hr)	0.5 mg/m ³	Poland
TWA (8hr)	0.5 ppm (as F)	Portugal	TWA (8hr)	1.5 mg/m ³	Romania
TWA (8hr)	1.5 mg/m ³	Spain	TWA (8hr)	1.5 mg (F)/m ³	UK
Ceiling	3 mg (F)/m ³	USA (ACGIH)	TWA (8hr)	2 mg (F)/m ³	USA (OSHA)

Engineering:

Safety shower and eye bath. Mechanical exhaust required.

Personal Protective Equipment:

As appropriate to quantity handled.

Respiratory Protection:

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.

Industrial Hygiene:

Wash thoroughly after handling.

Protective Gloves:

Compatible chemical-resistant gloves.

Eye Protection:

Chemical safety goggles.

Safety Data Sheet

According to Regulation (EC) No. 1907/2006
OSHA Regulation 29 CFR 1910.1200
Canadian Regulation SOR/88-66

SECTION 9: PHYSICAL/CHEMICAL PROPERTIES

Appearance:	Colorless liquid.	Odor:	Odorless	Density at 20°C:	1 g/cm ³
Melting Point:	NA	Boiling Point:	100 °C	Solubility:	Soluble
pH at 20°C:	< 4	Explosion Limit:	NA	Flash Point:	NA
Thermal Decomp.:	NA				

SECTION 10: STABILITY AND REACTIVITY

Conditions to be Avoided:

None

Hazardous Polymerization:

Will not occur.

Further Information:

Not available

Hazardous Decomposition Products:

Carbon monoxide, Carbon dioxide.

Substances to be Avoided:

Strong oxidizing agents..

SECTION 11: TOXICOLOGICAL INFORMATION

Product Toxicity

Quantitative data on the toxicity of this product is not available.

Potential Health Effects:

Inhalation:	Material is irritating to mucous membranes and upper respiratory tract. Harmful if inhaled.
Skin Contact:	Causes skin irritation. Harmful if absorbed through skin.
Eye Contact:	Causes eye irritation
Ingestion:	Harmful if swallowed.
Further Data:	TARGET ORGAN INFORMATION Liver. Kidneys.

Component Toxicity

Acute Toxicity:

Hydrofluoric Acid

LC50: Inhalation - Rat - 1276 ppm

Chronic Toxicity:

Not Available

Additional Data:

ACUTE TOXICITY

LCLO - Inhalation - Human: 50 ppm
(30M)

Remarks: Behavioral: Change in motor activity (specific assay).

Sense Organs and Special Senses (Nose, Eye, Ear, and

Taste): Eye: Lacrimation. Gastrointestinal: Changes in structure or function of salivary glands.

IRRITATION DATA

Eyes - Human - 50 mg

Remarks: Severe irritation effect

SECTION 12: ECOLOGICAL INFORMATION

No data available.

Safety Data Sheet

According to Regulation (EC) No. 1907/2006
OSHA Regulation 29 CFR 1910.1200
Canadian Regulation SOR/88-66

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal: Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

SECTION 14: TRANSPORTATION INFORMATION

	Land (ADR/RID):	Sea (IMDG):	Air (ICAO/IATA):
UN No.:	2922	2922	2922
Proper Shipping Name:	Corrosive liquid, toxic, n.o.s. (hydrofluoric acid solution)	Corrosive liquid, toxic, n.o.s. (hydrofluoric acid solution)	Corrosive liquid, toxic, n.o.s. (hydrofluoric acid solution)
Class (Sub Risk):	8 (6.1)	8 (6.1)	8 (6.1)
Packing Group:	III	III	III

SECTION 15: REGULATORY INFORMATION

Labeling according to EC Directives:

Symbol: Xn: Harmful

R-phrases: 20/21/22-36: Harmful by inhalation, in contact with skin and if swallowed. Irritating to the eyes.

S-phrases: 7/9-26-36/37-45: Keep container tightly closed and in a well-ventilated place. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing and gloves. In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).

Contains: Hydrofluoric Acid

SECTION 16: OTHER INFORMATION

Text of R-phrases under Section 3

26/27/28: Very toxic by inhalation, in contact with skin and if swallowed.
35: Causes severe burns.

Revision Information

Revision Date: 2012-05-31
Supersedes edition of: 2009-06-10
Reason for revision: Section 14 Updated

Legend

NA: Not Applicable
ND: Not Determined

THE INFORMATION CONTAINED HEREIN IS BASED ON THE PRESENT STATE OF OUR KNOWLEDGE. IT CHARACTERIZES THE PRODUCT WITH REGARD TO THE APPROPRIATE SAFETY PRECAUTIONS. IT DOES NOT REPRESENT A GUARANTEE OF THE PROPERTIES OF THE PRODUCT.