

Safety Data Sheet

Bray P-1, Concentrate

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Bray P-1, Concentrate

Synonyms/Generic Names: None

Product Number: 8260

Product Use: Industrial, Manufacturing or Laboratory use

Manufacturer: Columbus Chemical Industries, Inc.
N4335 Temkin Rd.
Columbus, WI. 53925

For More Information: 920-623-2140 (Monday-Friday 8:00-4:30)
www.columbuschemical.com

In Case of Emergency Call: CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

2. HAZARDS IDENTIFICATION

Signal Words: Danger

Pictograms:



GHS Classification:

Skin corrosion	Category 1B
Serious eye damage	Category 1
Specific target organ toxicity-single exposure	Category 3

GHS Label Elements, including precautionary statements:

Hazard Statements:

H314	Causes severe skin burns and eye damage.
H335	May cause respiratory irritation.

Precautionary Statements:

P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.

Potential Health Effects

Eyes	Causes eye burns.
Inhalation	May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
Skin	Harmful if absorbed through skin. Causes skin burns.
Ingestion	May be harmful if swallowed.

NFPA Ratings

Health	3
Flammability	0
Reactivity	0
Specific hazard	Not Available

HMIS Ratings

Health	3
Fire	0
Reactivity	0

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight %	CAS #	EINECS# / ELINCS#	Formula	Molecular Weight
Hydrochloric Acid	4-5	7647-01-0	231-595-7	HCl	36.46 g/mol
Ammonium Fluoride	1-3	12125-01-8	235-185-9	NH ₄ F	37.04 g/mol
Water	Balance	7732-18-5	231-791-2	H ₂ O	18.00 g/mol

4. FIRST-AID MEASURES

Eyes	Rinse with plenty of water for at least 15 minutes and seek medical attention immediately.
Inhalation	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately.
Skin	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention immediately.
Ingestion	Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention immediately.

5. FIREFIGHTING MEASURES

Suitable (and unsuitable) extinguishing media	Product is not flammable. Use appropriate media for adjacent fire. Cool containers with water, keep away from common metals.
Special protective equipment and precautions for firefighters	Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.
Specific hazards arising from the chemical	Emits toxic fumes under fire conditions. (Hydrogen chloride gas, Ammonia, Hydrogen fluoride gas) (See also Stability and Reactivity section). Material can react violently with water (spattering and misting) and react with metals to produce flammable hydrogen gas.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	See section 8 for recommendations on the use of personal protective equipment.
Environmental precautions	Do not let product enter drains. This material is acidic and may lower the pH of the surface waters with low buffering capacity. Releases should be reported, if required, to appropriate agencies.
Methods and materials for containment and cleaning up	Cleanup personnel need personal protection from inhalation and skin/eye contact. Evacuate and ventilate the area. Neutralize spill with soda ash or lime. Absorb neutralized spill with vermiculite or other inert absorbent material, then place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste or cleanup materials in accordance with regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use.

Conditions for safe storage, including any incompatibilities

Store in cool, dry well ventilated area. Keep away from incompatible materials (see section 10 for incompatibilities).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Component	Exposure Limits	Basis	Entity
Hydrochloric Acid	7 mg/m ³ (Ceiling)	PEL	USA OSHA
	7 mg/m ³ (Ceiling)	TLV	USA ACGIH
	7 mg/m ³ (Ceiling)	REL	USA NIOSH
	50 ppm	IDLH	OSHA
Ammonium Fluoride	2.5 mg/m ³	TWA	OSHA
	2.5 mg/m ³	TLV	ACGIH

TWA: Time Weighted Average over 8 hours of work.

TLV: Threshold Limit Value over 8 hours of work.

REL: Recommended Exposure Limit

PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit usually 15 minutes.

IDLH: Immediately Dangerous to Life or Health

WEEL: Workplace Environmental Exposure Levels

Personal Protection

Eyes	Wear chemical safety glasses with a face shield for splash protection.
Inhalation	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.
Skin	Wear neoprene or rubber gloves, apron and other protective clothing appropriate to the risk of exposure.
Other	Not Available

Other Recommendations

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling. Have supplies and equipment for neutralization and running water available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	Clear, colorless liquid
Odor	Sharp, irritating odor
Odor threshold	Not Available
pH	1
Melting point/freezing point	Not Available
Initial boiling point and boiling range	Not Available
Flash point	Not Flammable
Evaporation rate	Not Available
Flammability (solid, gas)	Not Flammable
Upper/lower flammability or explosive limit	Not Available
Vapor pressure	Not Available
Vapor density	Not Available
Relative density	1.0293 (water = 1)
Solubility (ies)	Completely soluble in water.

Partition coefficient: n-octanol/water	Not Available
Auto-ignition temperature	Not Available
Decomposition temperature	Not Available

10. STABILITY AND REACTIVITY

Chemical Stability	Stable
Possibility of Hazardous Reactions	Will not occur.
Conditions to Avoid	Heat
Incompatible Materials	Alkalis, amines, 2-Aminoethanol, Chlorosulfuric acid, glass, metals, nitrogen compounds, oleum
Hazardous Decomposition Products	Will yield hydrogen gas from contact with most metals, Hydrogen chloride gas, Hydrogen fluoride gas, Ammonia.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Hydrochloric Acid

Skin	Not Available
Eyes	Not Available
Respiratory	LC50 Inhalation – rat – 1h – 3124 ppm
Ingestion	LD50 Oral – rabbit – 900 mg/kg

Ammonium Fluoride

Skin	Not Available
Eyes	Not Available
Respiratory	Not Available
Ingestion	Not Available
Other	LD50 Intraperitoneal – rat – 31 mg/kg

Carcinogenicity

IARC	No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP	No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Signs & Symptoms of Exposure

Skin	May be harmful if absorbed through skin. Causes skin burns.
Eyes	Causes eye burns.
Respiratory	May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
Ingestion	May be harmful if swallowed. Causes burns.

Chronic Toxicity	Not Available
Teratogenicity	Not Available
Mutagenicity	Not Available
Embryotoxicity	Not Available
Specific Target Organ Toxicity	Not Available
Reproductive Toxicity	Not Available
Respiratory/Skin Sensitization	Not Available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Hydrochloric Acid

Aquatic Vertebrate	LC50 – <i>Gambusia affinis</i> (Mosquito fish) – 282 mg/l – 96 hours
Aquatic Invertebrate	LC80 (72 hours): 56 mg/L (<i>Daphnia Magna</i>)
Terrestrial	Not Available

Persistence and Degradability	Not Available
Bioaccumulative Potential	Not Available
Mobility in Soil	Not Available
PBT and vPvB Assessment	Not Available
Other Adverse Effects	Not Available

13. DISPOSAL CONSIDERATIONS

Waste Residues	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container or residue.
Product Containers	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

14. TRANSPORTATION INFORMATION

US DOT	UN2922, Corrosive liquids, toxic, n.o.s., (hydrochloric acid and ammonium fluoride), 8, (6.1), pg II
TDG	UN2922, CORROSIVE LIQUIDS, TOXIC, N.O.S., (HYDROCHLORIC ACID AND AMMONIUM FLUORIDE), 8, (6.1), PG II
IMDG	UN2922, CORROSIVE LIQUIDS, TOXIC, N.O.S., (HYDROCHLORIC ACID AND AMMONIUM FLUORIDE), 8, (6.1), PG II
Marine Pollutant	No
IATA/ICAO	UN2922, Corrosive liquids, toxic, n.o.s., (hydrochloric acid and ammonium fluoride), 8, (6.1), pg II

15. REGULATORY INFORMATION

TSCA Inventory Status	All ingredients are listed on the TSCA Active inventory.
DSL / NDSL	All ingredients are listed on the DSL inventory.
California Proposition 65	Not Listed
Rhode Island: Hazardous Substance List	Listed: Hydrochloric Acid, Ammonium Fluoride
Massachusetts: Toxic or Hazardous Substance List, Right to Know	Listed: Hydrochloric Acid, Ammonium Fluoride
Pennsylvania: Hazardous Substance List	Listed: Hydrochloric Acid, Ammonium Fluoride
New Jersey: Right to Know Hazardous Substance List	Listed: Hydrochloric Acid, Ammonium Fluoride
SARA 302	Not Listed
SARA 304	Not Listed
SARA 311	Acute Health Hazard, Chronic Health Hazard

SARA 312	Acute Health Hazard, Chronic Health Hazard
SARA 313	Not Listed
WHMIS Canada	Class D1A: Poisonous and infectious material – Immediate and serious effects – Very toxic Class E: Corrosive material

16. OTHER INFORMATION

Revision	Date
Original	08/04/2011
Revision 1	08/06/2013
Revision 2	09/18/2013
Revision 3	08/09/2021

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