



SECTION 1 - Chemical Product and Company Identification

1.1 Product Identifiers

Product Name : 6N HCl in IPA Solution
 CAS # : Mixture
 EC# : Mixture
 RTECS# : Mixture

1.2 Recommended Use of the Chemical and Restrictions of Use

Chemical manufacturing

1.3 Supplier Details

Supplier : BioSpectra, Inc. 100 Majestic Way
 Bangor, PA 18013
 T: 610.599.3400
ehs@biospectra.us

1.4 Emergency Numbers

Emergency Numbers : US & Canada: 1-800-424-9300
 : Outside the US & Canada: +1 703-527-3887

SECTION 2 – Hazard Identification

2.1 Classification of Substance or Mixture

Flammable Liquid (Category 2)
 Eye Irritation (Category 1)
 Skin corrosion/ irritation (Category 1)
 Specific Target Organ Toxicity-single exposure (Category 3), Central Nervous System

2.2 GHS Label Elements Including Precautionary Statements

Pictograms :   

Signal Word : Danger

Hazard Statements : H225 - Highly flammable liquid and vapor
 : H290 - May be corrosive to metals.
 : H314 - Causes severe skin burns and eye damage
 : H318 - Causes serious eye damage
 : H336 - May cause drowsiness or dizziness.

Precautionary statement(s) : P210 - Keep away from heat/ sparks/open flames/hot surfaces. No smoking
 : P233 - Keep container tightly closed.
 : P234 - Keep only in original container.
 : P240 - Ground/bond container and receiving equipment.

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- : P241 - Use explosion-proof electrical/ ventilating/ lighting/equipment.
- : P242 - Use only non-sparking tools.
- : P243 - Take precautionary measures against static discharge.
- : P261- Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
- : P264 - Wash skin thoroughly after handling.
- : P271 - Use only outdoors or in a well-ventilated area.
- : P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection
- : P303 + P361 + P353 - IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/shower.
- : P304 + P340+P312 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
- : P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue Rinsing.
- : P337 + P313 - If eye irritation persists: Get medical advice/attention.
- : P370 + P378 - In case of fire: Use dry sand. Dry chemical or alcohol-resistant foam for extinction.
- : P390 - Absorb spillage to prevent material damage.
- : P403 + P235 - Store in a well-ventilated place. Keep cool.
- : P405 - Store locked up.
- : P501 - Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not Classified or not Covered by the GHS

No information available

SECTION 3 – Composition, Information on Ingredients

Component	CAS Number	Concentration
2-Propanol	67-63-0	70-80%
Hydrogen Chloride	7647-01-0	20-23%

SECTION 4 - First Aid Measures

4.1 Description of Necessary First Aid Measures

Eyes	: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Consult a physician immediately.
Skin	: Get medical aid. Flush skin with plenty of tepid water for at least 15 minutes while removing contaminated clothing and shoes. Consult a physician if unwell.
Ingestion	: DO NOT induce vomiting unless instructed to do so by a medical professional. Never give anything by mouth to an unconscious person. Consult a physician immediately.
Inhalation	: Consult a physician immediately. Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
Notes to Physician	: Treat symptomatically and supportively.

4.2 Most Important Symptoms/Effects, Acute and Delayed

Refer to Section 2.2 for Precautionary Statements if any are applicable.

4.3 Indication of Immediate Medical Attention and Special Treatment

No information available.

SECTION 5 - Firefighting Measures

5.1 Extinguishing Media

Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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5.2 Specific Hazards Associated with this Chemical

Carbon oxides, Hydrogen chloride gas

5.3 Special Equipment/Precautions for Firefighters

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

5.4 Other Information

No information available.

SECTION 6 - Accidental Release Measures**6.1 Personal Precautions, Protective Equipment and Emergency Procedures**

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

6.2 Environmental Precautions

Do not allow to enter drains.

6.3 Methods and Materials for Containment and Cleaning Up

Contain spillage. Collect with an electrically protected vacuum cleaner or by wet-brushing. Place in container for disposal according to local regulations.

6.4 Other Information

No information available.

SECTION 7 - Handling and Storage**7.1 Precautions for Safe Handling**

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Take measures to prevent build-up of electrostatic charge

7.2 Conditions for Storage Including any Incompatibilities

Must be stored below 13°C (55°F) in a dry, well-ventilated area away from incompatible and combustible substances. Keep containers tightly closed.

7.3 Other Information

No information available.

SECTION 8 - Exposure Controls, Personal Protection**8.1 Control Parameters**

Component	Value	Control Parameter	Basis	Remark
2-Propanol	TWA	200 ppm	USA ACGIH Threshold Limit Values (TLV)	Central Nervous System Impairment Upper Respiratory Tract Irritation Eye Irritation Substances for which there is a Biological Exposure Index or Indices (see BEI® section) Not classifiable as a human carcinogen
2-Propanol	PEL	400 ppm 980 mg/m ³	USA. Occupational Exposure Limits (OSHA) – Table Z-1 Limits for Air Contaminants	None
2-Propanol	TWA	400 ppm 980 mg/m ³	USA. NIOSH Recommended Exposure Limits	None

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Component	Value	Control Parameter	Basis	Remark
2-Propanol	STEL	500 ppm 1,225 mg/m ³	USA. NIOSH Recommended Exposure Limits	None
Hydrogen Chloride	STEL	400 ppm	USA ACGIH Threshold Limit Values (TLV)	None

8.2 Engineering Controls

Use adequate ventilation to keep airborne concentrations low.

8.3 Personal Protective Equipment

Eyes

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Face protection shield.

Skin

Wear appropriate protective gloves to prevent skin exposure. Wear impervious gloves: Nitrile rubber with layer thickness 0.11mm.

Clothing

Wear appropriate protective clothing to prevent skin exposure.

Respirators

Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

SECTION 9 - Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Clear
Odor	: Not information available
pH	: <2
Vapor Pressure	: Not information available
Vapor Density	: Not information available
Flammability (LEL/UEL)	: 2 vol % / 12 vol %
Flash Point	: 11 ° C (52 ° F)
Boiling Point	: Not information available
Decomposition Temperature	: Not information available
Specific Gravity/Density	: 0.909
Solubility	: miscible

SECTION 10 - Stability and Reactivity

10.1 Chemical Stability

Hygroscopic

10.2 Conditions to Avoid

Incompatible products. Excess heat and direct sunlight. Keep away from open flames, hot surfaces, and sources of ignition. Exposure to moist air or water.

10.3 Incompatibilities with Other Materials

Strong oxidizing agents, bases, amines, metals

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10.4 Hazardous Decomposition Products

Carbon oxides, HCl gas

10.5 Hazardous Polymerization

Will not occur.

SECTION 11 - Toxicological Information**11.1 Toxicological Effects**

Acute Toxicity:

LD50 Oral: rat	: No information available.
Carcinogenicity:	: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
Epidemiology	: No information available.
Teratogenicity	: No information available.
Reproductive Effects	: No information available.
Neurotoxicity	: No information available.
Mutagenicity	: No information available.
Other Studies	: Causes severe burns by all exposure routes

11.2 Additional Information

To the best of our knowledge the associated physical, chemical and toxicological properties of this chemical have not undergone thorough investigation, all known information is contained in this SDS.

SECTION 12 - Ecological Information**12.1 Ecotoxicity**

Large amounts will affect pH and harm aquatic organisms. Do not empty into drains.

12.2 Persistence and Degradability

Persistence is unlikely based on information available. Miscible with water.

12.3 Bioaccumulative Potential

No information available.

12.4 Mobility in Soil

Will likely be mobile in the environment due to its volatility. Will likely be mobile in the environment due to its water solubility.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not conducted.

12.6 Other Adverse Effects

No information available.

SECTION 13 - Disposal Considerations

Dispose of in a manner consistent with Federal, State, and Local Regulations.

SECTION 14 - Transport Information

	US DOT	IATA	IMO	Canada TDG
Shipping Name:	Flammable Liquid, Corrosive, n.o.s (Isopropyl Alcohol, Hydrogen Chloride)	Flammable Liquid, Corrosive, n.o.s (Isopropyl Alcohol, Hydrogen Chloride)	Flammable Liquid, Corrosive, n.o.s (Isopropyl Alcohol, Hydrogen Chloride)	Flammable Liquid, Corrosive, n.o.s (Isopropyl Alcohol, Hydrogen Chloride)
Hazard Class:	3 (8)	3 (8)	3 (8)	3 (8)
UN Number:	UN2924	UN2924	UN2924	UN2924
Packing Group:	II	II	II	II

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SECTION 15 - Regulatory Information**15.1 EHS Chemical Specific Regulations****SARA:**

Section 302 (TPQ) : None of the chemicals in this product have a TPQ.
 Section 313 : 2-Propanol (acid manufactured)
 SARA 311/312 Hazards : Hydrogen Chloride CWA (5000 lbs. RQ)

SPECIFIC STATE:

Massachusetts Right To Know Components : 6N Hydrochloric Acid in 2-Propanol

Pennsylvania Right To Know Components : 6N Hydrochloric Acid in 2-Propanol
 New Jersey Right To Know Components : 6N Hydrochloric Acid in 2-Propanol
 California Prop. 65 Components : This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16 - Additional Information**16.1 Hazard Ratings****HMIS Rating**

Health hazard	2
Flammability	3
Physical Hazard	0

NFPA Rating

Health hazard	2
Fire Hazard	3
Reactivity Hazard	0

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