


Material Safety Data Sheet

	Red Bird	Health:	3 - Hazardous
	S e r v i c e	Fire:	0 - Minimal
		Reactivity:	0 - Minimal

205 Western Avenue P.O. Box 155 Osgood, IN 47037 USA

Phone: +1-812-689-4040

Fax: +1-812-689-4061

MSDS: 99029

Prep Date: 3/15/2001

Product: H180-4LITER (Hydrochloric Acid Solution)

Revision: 6

Section 1 - Chemical Product and Company Identification

Product Chemical Name: Hydrochloric Acid Solution

Chemical Formula: Hydrochloric Acid Solution

CAS No:

Manufacturer: Red Bird Services PO Box 155 205 Western Avenue Osgood IN 47037

For Emergency, Call Chemtree 24 hours a day....800-424-9300

Catalog Number: H-195, H-187, H-201, H-188, H-185, H-180, H-197

Synonym: N/A

Section 2 - Composition/Information on Ingredients

Ingredients	CAS Number	% wt or N
Water	7732-18-5	Balance
Hydrochloric Acid	7647-01-0	>2.0 - <5.0

OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH
TWA	STEL	TWA	STEL	TWA	STEL	IDLH
Not listed	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed
7mg/m3	7mg/m3	7.5mg/m3	Not listed	Not listed	Not listed	50ppm

Section 3 - Hazard Information

Primary Entry Route: Inhalation, digestion, and skin contact

Target Organs: Eyes, skin, respiratory system

Acute Effects: Irritation of nose, eyes, skin, and mouth to sever burns and ulcerations at high concentrations

Inhalation: Irritant

Eye: Dangerous

Skin: Irritant

Ingestion: Dangerous

Carcinogenicity: Not considered to be.

Medical Conditions: None listed

Chronic Effects: Sever burns to toxic

Section 4 - First Aid Measures

Inhalation: Move to fresh air, give oxygen if difficulty in breathing. Get medical attention.

Eye Contact: Flush with water for at least 15 minutes, including under eyelids. Get medical attention

Skin Contact: Flush with water for 15 minutes. If irritation persists, get medical attention.

Ingestion: Give water to drink to dilute material. Induce vomiting. Never give anything by mouth to anyone who is unconcious or convulsing. Get medical attention.

Special Precautions: NA

Section 5 - Fire Fighting Measures

Flash Point: nonflammable

Burning Rate: N/A

Auto Ignition: N/A
Temperature

LEL: N/A

UEL: N/A

Flammability
Classification: 0

Extinguishing

Media: Use that of surrounding fire.

Unusual Fire/Explosion Hazards: N/A

Hazardous Combustion Products: None listed

Instructions: Do not release runoff from fire control methods, to sewers, or waterways.

Equipment: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (scba) with a full facepiece operated with pressure demand or positive-pressure mode.

Section 6 - Accidental Release Measures

Spill/Leak Procedures: Cover with dry earth, dry sand, or non-combustible material followed by plastic sheet to minimize spreading

Small Spills: Cover with dry earth, dry sand, or non-combustible material followed by plastic sheet to minimize spreading

Large Spills: For containment; dike far ahead of the spill. Cover with dry earth, dry sand, or non-combustible material. Do not release into sewer or waterways.

Regulatory Requirement: Follow applicable OSHA regulations (29 CFR 1910.120).

Section 7 - Handling and Storage

Handling

Precautions: Wear safety glasses, goggles, or face shield, safety gloves, personal protective clothing, or respirator or airlines as required in section 8 in this MSDS.

Storage

Requirements: Store in closed container, cool, dry, in well-ventilated area, away from source of heat, and incompatible materials.

Regulatory

Requirement: See section 15 of this MSDS.

Section 8 - Exposure Controls/ Personal Protection

Engineering

Controls: N/A

Ventilation: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

Administrative

Controls: N/A

Respiratory

Protection: Seek professional advise prior to respirator selection and use, Follow OSHA respirator regulations (29 CFR 1910.134) and if necessary, wear a MSHA/NIOSH approved respirator. Select respirator based on it's suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or nonroutine operations (cleaning spills, reactor vessels or storage tanks), wear an SCBA. Warning! Air purifying respirators do not protect workers in oxygen-deficient atmospheres. If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

Protective

Clothing/

Equipment: Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety glasses. Per OSHA eye-and-face-ptotection regulations (29 CFR 1910.133).

Safety

Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Contaminated

Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

Comments: Contact lenses are not safety protection; soft lenses absorb and all lenses concentrate exposure. Practice good personal hygiene after use of this material especially before eating, drinking, smoking, using the toilet or applying cosmetics. Never eat, drink, or smoke in work areas.

Section 9 - Physical and Chemical Properties

Physical State: liquid (concentrated data)

Odor Threshld: 1-5

pH: NA

Vapor Press: 40.5 ATM @ 20 C

Boiling Point: -120.89

Vapor Density: 1.30

Freezing/ Melting Point: NA

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Formula Weight: 36.46

Viscosity: N/A

Density: N/A

Refract Index: N/A

Spec Gravity: N/A

Surface Tension: N/A

% Volatile: NA

Appearance

Odor: Clear, colorless liquid with pungent irritating odor.

Evaporation

Rate: NA

Water

Solubility: 67%N/A

Section 10 - Stability and Reactivity

Stability: Stable

Polymerization: Cannot not occur

Chemical

Incompatibilities: Most metals, forming hydrogen gases, may be explosive when mixed with potassium permanganate, sodium, fluorine.

Conditions to Avoid: Incompatibilities

Hazardous

Decomposition

Products: Hydrogen gas

Section 11 - Toxicological Information

Eye Effect: Dangerous

Skin Effect: Irritant

Acute

Inhalation

Effects: Irritant

Acute Oral

Effects: Dangerous

Chronic Effects: See section 3 in this MSDS.

Carcinogenicity: Not listed

Mutagenicity: Not listed

Teratogenicity: Not listed

Section 12 - Ecological Information

Ecotoxicity: N/A

Environmental

Fate: N/A**Environmental****Transport:** N/A**Environmental****Degradation:** N/A**Soil****Absorption****Mobility:** N/A**Section 13 - Disposal Considerations****Disposal:** See section 6 of this MSDS**Disposal****Regulatory****Requirements:** See section 15 of this MSDS.**Container****Cleaning and****Disposal:** N/A**Section 14 - Transport Information****Shipping Name:** Corrosive Liquid, Inorganic, N.O.S. (hydrochloric Acid)**Shipping Symbol:** N/A**Nn-Blk Packaging:** 202**Hazard Class:** 8**Bulk Packaging:** 242**Id No:** UN3264*Quantity Limitations:***Packing Group:** III**Passenger, Air, or Rail:** 1 L**Label:** Corrosive**Cargo Aircraft Only:** 30L**Special Provision:** B2, T14*Vessel Stowage Requirements:***Packaging****Exceptions:** 154**Vessel Stowage:** B**Other:** 40**Section 15 - Regulatory Information**

EPA Regulation: listed

RCRA hazardous waste number: Not listed (40 CFR 261.33) listed

RCRA hazardous Waste classification: (40 CFR 261.??): classified.

CERCLA hazardous Substance (40 CFR 302.4): not listed specific peer RCRA, Sec 3001; CWA, Sec 311 (b)(4); CWA,,Sec 307(a), listed

CAA:

CERCLA Reportable Quality (RQ): listed

SARA 311/312 Codes: listed

SARA Toxic Chemical (40 CFR 372.65): listed

SARA EHS (Extremely hazardous substance)(40 CFR 355): Not listed, Threshold Planning Quality (TPQ) Listed

OSHA Regulations: listed

Air contaminant (29 CFR 1910.1000, Table Z-1-A):

OSHA Specifically Regulated Substance(29 CFR 1910.1000): listed

State Regulations: STCC Listed,
DOT(40 CFR 172.101 Append.): listed
ACGIH Threshold Limit Value: listed
MAK: listed
TSCA: listed
ANNEX I: listed

Section 16 - Other Information

Prepared By: Katie Richards

Approved By: **Gene Feith** **Operation Manager** **Red Bird Service**

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