SAFETY DATA SHEET



SECTION 1: IDENTIFICATION

SECTION 2: HAZARDS IDENTIFICATION

Classification	Health, Acute toxicity, Oral Health, Skin corrosion/irritation Health, Acute toxicity, Inhalation	Category 5 Category 1B Category 4
Label elements	Health, Specific target organ toxicity – Single exposure	Category 3
Signal word	DANGER	
Hazard statement:	H303 - May be harmful if swallowed H314 - Causes severe skin burns and eye damage H332 - Harmful if inhaled H335 - May cause respiratory irritation	
Precautionary statement	P304 - IF INHALED: Move individual to fresh air and contact a P305 - IF IN EYES: Flush eyes with plenty of water. If redness P302+352 - IF ON SKIN: Wash with soap and water. P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induc	persists, seek medical attention.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS number	<u>%</u>
Phosphoric acid	7664-38-2	5-10
Sulfamic acid	5329-14-6	< 5
Hydrochloric acid	7647-01-0	5-10

SECTION 4: FIRST AID MEASURES

Inhalation	mptoms develop, move victim to fresh air. If symptoms persist, obtain medical attention.		
Skin contact	Promptly flush skin with soap and water until all chemical is removed.		
Eye contact	Flush eyes with large amounts of water for at least 15 minutes, lifting eyelids occasionally to facilitate irrigation. Contact a physician if redness persists.		
Ingestion	Give 1-2 glasses of water. Do not induce vomiting. Get medical advice. Do not give anything by mouth to an unconscious or convulsing person.		
SECTION 5: FIRE-FIGHTING	MEASURES		
Flash Point	> 200°F (93.3°C)		
Extinguishing media	Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.		
Unsuitable extinguishing me	dia Not applicable.		
Hazardous combustion prod	ucts Not available.		
Special exposure hazards	None.		

Special protective equipment Full protective clothing and approved self-contained breathing apparatus required for firefighting personnel.

SECTION 6: ACCIDENTAL RELEAS	E MEASURES		
Personal precautions	Use appropriate protective equipment. (See Section 8.) Do not get into eyes, skin, or clothing.		
	Wear respiratory protection. Avoid breathing vapors. Ensure adequate ventilation.		
Environmental precautions	Do not empty into drains.		
Methods and materials for	Soak up residue with an absorb	pent such as clay or sand. Place in a non-leaking container for	
containment and cleaning up		ederal, State, and Local regulations. Do not discharge into	
0.1	waterways or sewage systems.		
SECTION 7: HANDLING AND STO	RAGE		
Handling precautions	Use in a well-ventilated area.	oo not breathe vapors. Do not get on skin, eyes, or clothing.	
Storage requirements	Keep from freezing. Store betw	veen 50 and 80 degrees F. Keep container closed and in a well-	
0	ventilated area.		
SECTION 8: EXPOSURE CONTROL	S/PERSONAL PROTECTION		
Engineering controls	Use in well ventilated area.		
Personal protective equipment	HMIS PP, C Safety Glasses, Gl	oves. Apron	
General hygiene		actice. Avoid contact with skin, eyes, and clothing. Avoid inhalation	
	of vapors.		
Hydrochloric acid	7647-01-0	5-10%	
Components with workplace cont			
Ceiling	2 ppm	USA ACGIH Threshold Limit	
Upper respiratory tract irritation		Values (TLV)	
Not classifiable as human carcino	zen		
Ceiling	5 ppm	USA Occupational exposure limits (OSHA) –Table Z-1 Limits for air	
2	7mg/m3	contaminants	
	-		
The value in mg/m3 is approximat Ceiling limit is to be determined fr			
Ceiling	5 ppm	USA OSHA – Table Z-1 Limits for air contaminants-1910.1000	
-	7 mg/m3		
Ceiling	5 ppm	USA NIOSH Recommended exposure limits	
Often used in aqueous solution	7 mg/m3		
·	5220 44 6		
Sulfamic acid	5329-14-6	<5% No data available	
Phosphoric acid Components with workplace cont	7664-38-2	5-10%	
TWA	1mg/m3	USA ACGIH Threshold Limit Values (TLV)	
Eye, skin, & upper respiratory trac	-		
STEL	3 ppm	USA ACGIH Threshold Limit Values (TLV)	
Eye, skin, & upper respiratory trac			
TWA	1 mg/m3	USA Occupational exposure limits (OSHA) –Table Z-1 Limits for air	
		contaminants	
TWA	1 mg/m3	USA OSHA – Table Z-1 Limits for air contaminants-1910.1000	
IWA	THIGHTS		
STEL	3mg/m3	USA OSHA – Table Z-1 Limits for air contaminants-1910.1000	
TWA	1mg/m3	USA NIOSH Recommended exposure limits	
ST	3mg/m3	USA NIOSH Recommended exposure limits	
SECTION 9: PHYSICAL AND CHEN	IICAL PROPERTIES		
Physical state	Liquid		
Color	Clear green liquid		
Odor	Mountain fresh		

Odor threshold	Not available
Specific gravity/density	1.10
Viscosity	Not available
Boiling point	212°F (100°C)
Flammability	Not available
Partition coefficient	Not available
Vapor pressure	Not available
pH	< 1.0
Evaporation rate	Slower than water
Decomposition temperature	Not available
Solubility	Soluble in water
Melting point/freezing point	Not available
Flash point	> 200°F (93.3°C)
Vapor density	Not available
Auto-Ignition Temperature	Not available

SECTION 10: STABILITY AND REACTIVITY

Stability	Stable
Conditions to avoid	Open flame and heat.
Materials to avoid	Alkaline materials and strong oxidizing materials.
Hazardous decomposition	Hydrochloric Acid Gas
Hazardous polymerization	Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Hydrochloric acid	7647-01-0	5-10%
Acute toxicity	No data available (Hydrochloric acid)	
Inhalation	No data available (Hydrochloric acid)	
Dermal	No data available (Hydrochloric acid)	
Skin corrosion/irritation	Skin –rabbit	Result: Causes burns
Serious eye damage/eye irritation	Eyes-rabbit (Hydrochloric acid)	Result: Corrosive to eyes
Respiratory or skin sensitization	No data available (Hydrochloric acid)	
Germ cell mutagenicity	No data available (Hydrochloric acid)	
Carcinogenicity	This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification. (Hydrochloric acid)	
IARC	3 - Group 3: Not classifiable as to its carcino	
NTP	No component 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 component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.	
Reproductive toxicity	No data available	
Specific target organ toxicity	Single exposure-No data available	Repeated exposure-No data available
Aspiration hazard	No data available	
Additional Information	RTECS: Not available	

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Symptoms and signs of poisoning are:, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, Inhalation may provoke the following symptoms:, spasm, inflammation and edema of the bronchi, spasm, inflammation and edema of the larynx, Aspiration or inhalation may cause chemical pneumonitis. 7664-38-2 5-10% Phosphoric acid Information on toxicological effects

information on toxicological effects	
Acute toxicity	No data available
Inhalation	No data available

Dermal	No data available	
Skin corrosion/irritation	No data available	
Serious eye damage/eye irritation	No data available	
Respiratory or skin sensitization	No data available	
Germ cell mutagenicity	No data available	
Carcinogenicity		
IARC	No component of this product present at levels greater than or equal to 0.1% is	
ACGIH	identified as probable, possible or confirmed human carcinogen by IARC. No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by ACGIH. No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.	
NTP		
OSHA	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.	
Reproductive toxicity	No data available	
Specific target organ toxicity	Single exposure-No data available	Repeated exposure-No data available
Aspiration hazard	No data available	
Additional Information	RTECS: Not available	

burning sensation, Cough, wheezing, laryngitis, Shortness of breath, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.

Stomach - Irregularities - Based on Human Evidence

Stomach - Irregularities - Based on Human Evidence (Phosphoric acid)

Stoffacht - Integularities - Dased off Human E		
SECTION 12: ECOLOGICAL INFORMATION		
Hydrochloric acid	7647-01-0	5-10%
Information o ecological effects		
Toxicity to fish LC50	Gambusia affinis (Mosquito fish)	282 mg/l – 96 h (Hydrochloric acid)
Persistence and degradability	No data available	
Bioaccumulative potential	No data available	
Mobility in soil	No data available (Hydrochloric acid)	
Results of PBT and vPvB assessment PBT/vP conducted Other adverse effects	vB assessment not available as chemical safet No data available	ry assessment not required/not
Sulfamic acid	5329-1-6	<5%
Information o ecological effects	5525 1 0	
-	No data available	
Toxicity		
Persistence and degradability	No data available	
Bioaccumulative potential	No data available	
Mobility in soil	No data available	
Results of PBT and vPvB assessment PBT/vP conducted	vB assessment not available as chemical safet	y assessment not required/not
Other adverse effects	An environmental hazard cannot be exclude disposal. Harmful to aquatic life.	ed in the event of unprofessional handling or
Phosphoric acid	7664-38-2	5-10%
Information o ecological effects		
Toxicity	No data available	
Persistence and degradability	No data available	

Bioaccumulative potential	No data available
Mobility in soil	No data available
Results of PBT and vPvB assessme conducted	ent PBT/vPvB assessment not available as chemical safety assessment not required/not
Other adverse effects	No data available
SECTION 13: DISPOSAL CONSIDE	RATIONS
Empty containers	Empty Containers: If empty container retains product residue, all label precautions must be observed. Dispose of unused product prior to disposing of empty container.
Disposal considerations of substance	Do not discharge into waterways or sewage systems. Transport with all closures in place. Return for reuse or dispose of according to national, local, and state regulations.
SECTION 14: TRANSPORT INFOR	MATION
Hydrochloric acid, Limited Quanti	ity
Marine Pollutant: No	
SECTION 15: REGULATORY INFO	RMATION
COMPONENT / (CAS/PERC) / CODES	
	I7-01-0 5-10%) CERCLA, CSWHS, EHS302, EPCRAWPC, HAP, MASS, NJEHS, NJHS, OSHAPSM,
OSHAWAC, PA, SARA313, TSCA, TXAII Sulfamic acid (5329-14-6 <5%) TSCA	
	-38-2 5-10%) CERCLA, CSWHS, EPCRAWPC, MASS, NJHS, OSHAWAC, SARA313, TSCA, TXAIR
REGULATORY CODE DESCRIPTIONS-	
RQ=Reportable Quantity	
CERCLA = Superfund cleanup substance CSWHS = Clean Water Act Hazardous substances	
EHS302 = Extremely Hazardous Substance	
EPCRAWPC = EPCRA Water Priority Chemicals	
HAP = Hazardous Air Pollutants	
MASS = MA Massachusetts Hazardous Substances List	
NJEHS = NJ Extraordinarily Hazardous Substances	
OSHAPSM = OSHA Chemicals Requiring process safety management	
OSHAWAC = OSHA Workplace Air Contaminants	
PA = PA Right-To-Know List of Hazardous Substances SARA313 = SARA 313 Title III Toxic Chemicals	
SARA313 = SARA 313 Title III Toxic Chemicals TSCA = Toxic Substances Control Act	

Hazardous Materials Identification System (HMIS)

SECTION 16: OTHER INFORMATION

TXAIR = TX Air Contaminants with Health Effects Screening Level

HMIS [®] RATING:	
HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	1

Important Note: To be the best of our knowledge, the information contained herein is accurate. However there is no assumption of liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. Since the conditions of handling, storage and disposal of this product are beyond the control of the manufacturer/supplier, the manufacturer/supplier will not be responsible for loss, injury, or expense arising out of the products improper use. Various government agencies may have specific regulations regarding the transportation, handling, storage, use, or disposal of this product which may not be covered by this SDS. The user is responsible for full compliance.

End of SDS