3.10.20-FM
Safety Data Sheet
Form No. A741 **Date Prepared: 10/14/2021**

SECTION 1 : Identification of the substance/preparation and of the company / undertaking

(a) GHS product identifier
Vitex Liquid B

(e) Emergency phone number
CHEMTREC 1-800-424-9300
CCN9105

(b) Other means of identification
Muriatic Acid

(c) Recommended use of the chemical and restrictions on use
Dental manufacturing or Laboratory use

(d) Supplier's details
Garreco, LLC.
430 Hiram Road
Heber Springs, AR 72543
Phone: 1-800-334-1443

SECTION 2: Hazards identification

(a) GHS classification of the substance/mixture

Substance Name

1. Hydrochloric Acid

(b) Label Elements

Hazard statements
Causes severe skin burns and eye damage.
May cause respiratory irritation.

Precautionary statements
Do not breathe dusts or mists.
Wash thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
Use only outdoors or in a well-ventilated area.

Response

IF ON SKIN: Causes severe skin burns. Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse.

IF INHALED: May cause respiratory irritation. Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor.

IF SWALLOWED: Causes severe burns. Rinse mouth. DO NOT induce vomiting. Immediately call a poison center or doctor if you feel unwell.

IF IN EYES: Causes severe burns and eye damage. Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

Storage
Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal
Dispose of content/container in accordance with local/regional/national regulations.

Hazard Symbol(s)
Corrosion
Exclamation Mark

Signal Word(s)
Danger

(c) Other hazards which do not result in classification
ND

SECTION 3: Composition/information on ingredients

(a) Chemical(s) Identity:		**Mixture:**
(b) Common Name:	**(c) CAS No.**	**Concentration (Percentage)**
Hydrochloric acid	7647-01-0	10-38%

SECTION 4: First-aid measures

(a) Description of first aid measures:

IF ON SKIN (or hair): Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention immediately.

IF INHALED: 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.

IF SWALLOWED: DO NOT INDUCE VOMITING! Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention immediately.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately seek medical attention.

(b) Most important symptoms and effects, both acute and delayed:

Toxic if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. Causes eye burns. Causes skin burns. Harmful is swallowed or absorbed through skin.

(c) Indication of any immediate medical attention and special treatment needed:

Burns, inflammation of respiratory tract, choking, vomiting.

SECTION 5: Fire-fighting measures

(a) Suitable extinguishing media:

Product is not flammable. Use appropriate media for adjacent fire. Cool containers with water.

(b) Special hazards arising from the chemical or mixture:

Emits toxic (hydrogen chloride gas) fumes under fire conditions.

(c) Special protective equipment and precautions for fire-fighters:

Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.

SECTION 6: Accidental release measures

(a) Personal precautions, protective equipment and emergency procedures:

Wear chemical safety glasses. Use an OSHA approved respirator. Wear nitrile or rubber gloves and apron.

(b) Environmental precautions:

Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.

(c) Methods and material for containment and cleaning up:

Neutralize spill with sodium bicarbonate or lime. Absorb spill with noncombustible absorbent material, then place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.

SECTION 7: Handling and storage

(a) Precautions for safe handling:

Wear appropriate Personal Protective Equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of aerosols.

(b) Conditions for safe storage, including any incompatibilities:

Store in cool, dry, well ventilated area. Keep away from incompatible materials.

SECTION 8: Exposure controls/Personal protection

(a) Control parameters:

	ACGIH	OSHA
Chemical	**TLV**	**PEL TWA**
Hydrochloric acid	2 ppm, 2.98 mg/m³	5 ppm, 7mg/m³

(b) Appropriate Engineering Controls:

Ventilate to keep exposures below TLV requirements of the individual ingredients. General ventilation is expected to be satisfactory. Use local exhaust ventilation if necessary to control fumes. Ensure an eyewash station is near in case of contact with eyes.

(c) Individual protection measures:

RESPIRATORY: None required where adequate ventilation conditions exist. Wear a NIOSH/OSHA approved dust respirator in poorly ventilated areas or if TLV requirements are exceeded.

OTHER PROTECTIVE EQUIPMENT: Wear chemical safety glasses. Wear nitrile or rubber gloves and apron.

SECTION 9: Physical and chemical properties

(a) Appearance:	Light yellow liquid
(b) Odor:	Strong, pungent odor.
(c) Odor threshold:	0.25 - 10 ppm
(d) pH:	Acidic
(e) Melting point / freezing point:	-30°C (-22°F)
(f) Initial boiling point and boiling range:	50.5°C (122.9°F)
(g) Flash point	Not flammable
(h) Evaporation rate (BuAc=1):	NA
(i) Flammability:	Not Flammable
(j) Upper/lower flammability or explosive limits:	Not explosive
(k) Vapor Pressure:	227 hPa (170 mmHg) at 21.1°C (70°F) 547 hPa (410 mmHg) at 37.7°C (99.9°F)
(l) Vapor density:	1.267 (air=1)
(m) Relative density:	1.17 g/cm³
(n) Solubility:	Soluble in water, diethyl ether.
(o) Partition coefficient: n-octanol/water:	NA
(p) Auto-ignition temperature:	NA
(q) Decomposition temperature:	NA
(r) Viscosity:	NA

SECTION 10: Stability and reactivity

(a) Reactivity:	Stable
(b) Chemical stability:	Stable
(c) Possibility of hazardous reactions:	Will not occur.
(d) Conditions to avoid:	Metals, oxidizing agents, organic materials, alkalis, water.
(f) Hazardous decomposition products:	Hydrogen chloride gas.

SECTION 11: Toxicological information

Acute toxicity	NA
Skin corrosion/irritation	NA
Serious Eye Damage / Irritation	NA
Respiratory or skin sensitization	NA
Germ cell mutagenicity	May alter genetic material.
Carcinogenicity	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen for potential carcinogen by OSHA.
Reproductive toxicity	NA
STOT-single exposure	Kidneys, liver, mucous membranes, upper respiratory tract, skin eyes, circulatory system, teeth.
STOT-repeated exposure	Kidneys, liver, mucous membranes, upper respiratory tract, skin eyes, circulatory system, teeth.
Aspiration Hazard	Yes

(a) Exposure route: inhalation, skin and/or eye contact

(b) Symptoms related to the physical, chemical and toxicological characteristics:

Irritation and burns. Severe eye irritation, conjunctivitis, burns, corneal necrosis. Pain, inflammation of upper respiratory tract and mucous membranes, coughing, sneezing, choking. Ulceration, fever, vomiting, nausea, diarrhea, thirst, difficulty swallowing, salivation.

(c) Delayed and immediate effects and also chronic effects from short and long tem exposure:

Irritation and burns. Severe eye irritation, conjunctivitis, burns, corneal necrosis. Pain, inflammation of upper respiratory tract and mucous membranes, coughing, sneezing, choking. Ulceration, fever, vomiting, nausea, diarrhea, thirst, difficulty swallowing, salivation.

(d) Numerical measures of toxicity:

NA

SECTION 12: Ecological information

(a) Ecotoxicity:

LC50 - Gambusia affinis - 282 mg/L - 96 h

(b) Persistence and degradability:

NA

(c) Bioaccumulative potential

NA

(d) Mobility in soil:

NA

(e) Other adverse effects:

NA

SECTION 13: Disposal considerations

Product:

Recommendation

Review operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies before disposing of waste product container.

SECTION 14: Transport information

(a) UN Number	UN 1766
(b) UN Proper shipping name	Hydrochloric Acid
(c) Transport hazard class(es)	8
(d) Packing Group	2
(e) Environmental hazards	No
(f) Transport in bulk	NA
(g) Other Information	NA

SECTION 15: Regulatory information

SARA Reporting Requirements:	Not listed
SARA Threshold Planning Quantity:	NA
TSCA Inventory Status:	All ingredients are listed on the TSCA Inventory.
Other Federal Requirements:	All ingredients are listed on the DSCL Inventory.
Other Canadian Regulations:	Class D-2A: Material causing other toxic effects (VERY TOXIC). Class E: Corrosive material.
State Regulatory Information:	Not listed.

SECTION 16: Other information

PREPARED BY: Kristofer Mainar
GAR QMS SDS REFERENCE: A059

HAZARDOUS MATERIAL IDENTIFICATION (HMIS) RATING:

Health	3
Flammability	0
Reactivity	1
Other	H

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RATING:

Health	3
Flammability	0
Reactivity	1
Specific hazard	NA

REVISION NUMBER: 211014

CHANGES FROM PREVIOUS VERSION: Added Chemtrec account number on 4/12/17.
Note; on 11/25/19 this SDS was corrected to show CHEMTREC instead of CHEMTRAC
Reviewed for accuracy - 4/26/21 Kristofer Mainar
Corrected UN number from UN 1789 to UN 1766 - 10/14/2021 Kristofer Mainar

ABBREVIATIONS

NA Not Applicable
ND Not Determined
NE Not Established
ppm parts per million
G Gallon
mg Milligram
L Liter
gm Gram
mol Mole
kg Kilogram
µ Micro
mm Millimeter
p Pico
Pa Pascals
c cento
LC Lethal Concentration
ACGIH American Conference of Governmental Industrial Hygienist
NDSL Canadian Non-domestic Substance List
IARC International Agency for Research for Cancer
NOAEL No Observed Adverse Effect Level
OSHA Occupational Safety and Health Administration
LD Lethal Dose
TC Toxic Concentration
TD Toxic Dose
BOD Biological Oxygen Demand
COD Chemical Oxygen Demand
Lo Lowest
ThOD Theoretical Oxygen Demand
TLm Threshold Limit
IC Inhibitory Concentration
DOC Dissolved Organic Carbon
H Hours
M Months
D Days
Y Years
W Weeks
NOEL No Observed Effect Level
CPR Controlled Product's Regulation
DSL Canadian Domestic Substances List
PEL Permissible Exposure Limit
TLV Threshold Limit Value

SECTION 16: Other information

THIS MATERIAL SAFETY DATA SHEET IS PREPARED IN COMPLIANCE WITH FEDERAL REGULATIONS (29 CFR 1910.1200) OFCHEMICALS AND THE GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING REVISION 5. ANY APPLICABLE STATE AND LOCAL REGULATIONS SHOULD BE CONSULTED. THE ABOVE INFORMATION MAY BE BASED IN PART ON INFORMATION PROVIDED BY COMPONENT SUPPLIERS AND IS BELIEVED TO BE CORRECT AS OF THE DATE HEREOF. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY USE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OF THESE DATA, THE RESULTS TO BE OBTAINED FROM THE USE OF THE MATERIAL, OR THE HAZARDS CONNECTED WITH SUCH USE. SINCE THE INFORMATION CONTAINED HEREIN MAY BE APPLIED UNDER CONDITIONS BEYOND OUR CONTROL AND WITH WHICH WE MAY BE UNFAMILIAR, AND SINCE DATA MADE AVAILABLE SUBSEQUENT TO THE DATE HEREOF MAY SUGGEST MODIFICATION OF THE INFORMATION, WE ASSUME NO RESPONSIBILITY FOR THE RESULT OF ITS USE. THIS INFORMATION AND MATERIAL IS FURNISHED ON THE CONDITION THAT THE PERSON RECEIVING IT SHALL MAKE HIS/HER OWN DETERMINATION AS TO THE SUITABILITY OF THE MATERIAL FOR HIS/HER PARTICULAR PURPOSE AND ON THE CONDITION THAT HE/SHE ASSUME THE RISK OF HIS/HER USE THEREOF.