

SECTION 1 : Identification of the substance/preparation and of the company / undertaking**(a) GHS product identifier**

Vitex Refractory Model Hardener

(e) Emergency phone numberCHEMTREC 1-800-424-9300
CCN9105**(b) Other means of identification**

N/A

(c) Recommended use of the chemical and restrictions on use

For professional dental applications.

(d) Supplier's detailsGarreco, 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. Acetone
2. Alcohol Anhydrous 95
3. Gum Resin

(b) Label Elements**Hazard statements**

Highly flammable liquid and vapor.
Causes serious eye irritation.
May cause drowsiness or dizziness.
May cause an allergic skin reaction.
Toxic if swallowed.
Causes skin irritation.
Toxic if inhaled.
May cause respiratory irritation.
Toxic in contact with skin.
Causes damage to organs.
Harmful to aquatic life.

Precautionary statements

Keep away from heat, hot surface, sparks, open flames and other ignition sources. No smoking.
Keep container tightly closed.
Use explosion-proof equipment. Ground and bond container and receiving equipment.
Use non-sparking tools. Take action to prevent static discharges.
Wear protective gloves/clothing/eye/face protection. Contaminated clothing should not leave the workplace.
Wash thoroughly after handling.
Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area.

Response

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. If skin irritation or rash occurs: Get medical attention.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center if you feel unwell.

IF IN EYES: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. If eye irritation persists: Get medical attention.

Storage

Store in a well-ventilated place. Keep cool. Store locked up.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard Symbol(s)Exclamation Mark
Flame**Signal Word(s)**

Danger

(c) Other hazards which do not result in classification

NA

SECTION 3: Composition/information on ingredients**(a) Chemical(s) Identity:****(b) Common Name:**Acetone
Ethanol
Gum Rosin**(c) CAS No.**67-64-1
64-17-5
8050-09-7**Mixture:****Concentration (Percentage)**≤ 55%
≤ 22%
≤ 22%

SECTION 4: First-aid measures

(a) Description of first aid measures:

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Wash before reuse. Immediately flush with plenty of water for at least 15 minutes.

IF SWALLOWED: Get medical attention immediately. Rinse mouth. Do NOT induce vomiting. Never give liquid to an unconscious person.

IF IN EYES: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. If breathing is difficult, give oxygen. Perform artificial respiration if breathing has stopped. Immediately call a poison center.

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

Nausea, difficulty breathing, skin irritation and eye damage.

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

Nausea, difficulty breathing, skin irritation and eye damage.

SECTION 5: Fire-fighting measures

(a) Suitable extinguishing media:

Do not use direct water spray; will scatter and spread fire. Use Dry chemical, Carbon Dioxide or Foam.

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

Flammable liquid. Forms explosive mixtures with air. Vapors are heavier than air and may travel to a source of ignition and flash back. Combustion produces toxic gases including carbon monoxide and oxides of sulfur.

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

Move container from fire area if it can be done without risk. Cool containers with water. Wear NIOSH approved positive-pressure self-contained breathing apparatus operated in pressure demand mode. Firefighters must use standard protective equipment. Vapors are heavier than air and may spread near ground to sources of ignition.

SECTION 6: Accidental release measures

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

Wear appropriate protective gloves, eye protection, and respiratory protection. Keep unauthorized personnel away.

(b) Environmental precautions:

Do not release into the environment. Keep out of water supplies and sewers.

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

All equipment used must be grounded. Eliminate sources of ignition. Absorb spillage with non-combustible, absorbent material. Dike for later disposal.

SECTION 7: Handling and storage

(a) Precautions for safe handling:

Keep away from oxidizers, heat and flames. Use only in well-ventilated areas. Avoid breathing gas/mist/vapors. Store away from incompatible materials. Avoid free fall of liquid. Ground containers when transferring.

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

Flammable liquid storage. Keep container tightly closed and upright in a cool, well-ventilated place.

SECTION 8: Exposure controls/Personal protection**(a) Control parameters:**

Chemical	ACGIH		OSHA	
	TWA	PEL	TWA	
Acetone	500 ppm	1000 ppm	750 ppm	
Alcohol Anhydrous 95	1000 ppm		1000 ppm	
Gum Resin	3 mg/m ³		NA	

(b) Appropriate Engineering Controls:

Use explosion-proof ventilation equipment to stay below exposure limits. Provide eyewash station and safety shower.

(c) Individual protection measures:

Follow good personal hygiene measures. Wear safety glasses/face shield in case of splash risk. Wear chemical resistant gloves. Use an approved respirator if there is risk of exposure to fumes exceeding the exposure limits.

SECTION 9: Physical and chemical properties

(a) Appearance:	Yellow-brown liquid
(b) Odor:	Ketone
(c) Odor threshold:	ND
(d) pH:	ND
(e) Melting point / freezing point:	-95°C
(f) Initial boiling point and boiling range:	56.5°C
(g) Flash point: ND	-20°C
(h) Evaporation rate (BuAc=1):	~1.5
(i) Flammability:	High Flammability
(j) Upper/lower flammability or explosive limits:	~4.3
(k) Vapor Pressure:	~48.3
(l) Vapor density:	~1.6
(m) Relative density:	ND
(n) Solubility:	Appreciable
(o) Partition coefficient: n-octanol/water:	ND
(p) Auto-ignition temperature:	-20°C
(q) Decomposition temperature:	ND
(r) Viscosity:	ND

SECTION 10: Stability and reactivity

(a) Reactivity:	Stable under normal conditions.
(b) Chemical stability:	Stable under normal conditions.
(c) Possibility of hazardous reactions:	Hazardous polymerization will not occur, highly flammable.
(d) Conditions to avoid:	Keep away from heat, sparks, open flame, oxidizers, and acids.
(f) Hazardous decomposition products:	Thermal decomposition may liberate carbon oxides/toxic gases.

SECTION 11: Toxicological information

Acute toxicity	Can be fatal if swallowed.
Skin corrosion/irritation	May cause severe skin burns.
Serious Eye Damage / Irritation	May cause serious eye damage.
Respiratory or skin sensitization	May cause serious respiratory irritation.
Germ cell mutagenicity	ND
Carcinogenicity	Overexposure may create cancer risk.
Reproductive toxicity	ND
STOT-single exposure	Skin, eyes, respiratory system, kidneys, nerves, liver, lungs, stomach.
STOT-repeated exposure	Can cause blindness, nervous system depression.
Aspiration Hazard	Aspiration hazard if swallowed - can enter lungs and cause damage.

(a) Exposure route: Skin, eyes, inhalation, ingestion.

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

Skin irritation, tearing, blurred vision, difficulty breathing, nausea, drowsiness, dizziness, vomiting, and diarrhea.

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

Skin irritation, tearing, blurred vision, difficulty breathing, nausea, drowsiness, dizziness, vomiting, diarrhea, blindness, nervous system depression.

(d) Numerical measures of toxicity:

Alcohol Anhydrous 95 LD₅₀ (oral) 1000.0 mg/kg (man); LD₅₀ (skin) 20000.0 mg/kg (rabbits)
 LC₅₀ (vapors) 1600 ppm (rats)

SECTION 12: Ecological information**(a) Ecotoxicity:**

Acetone - Mortality LC₅₀ (Fathead minnow, 2h): 7081 - 9120 mg/l
 EC₅₀ (Water flea, 2h): >100 mg/l
 Alcohol - Goldfish 250 ppm or mg/L (24h)

(b) Persistence and degradability:

ND

(c) Bioaccumulative potential

ND

(d) Mobility in soil:

This material is a mobile liquid.

(e) Other adverse effects:

May be harmful or fatal to plant and animal life if release into the environment.

SECTION 13: Disposal considerations**Product:****Recommendation**

Dispose of waste and residues in accordance with federal, state, and local authority requirements.

SECTION 14: Transport information**(a) UN Number**

UN 1090, UN 1170

(b) UN Proper shipping name

ACETONE, ETHYL ALCOHOL SOLUTION

(c) Transport hazard class(es)

3

(d) Packing Group

2

(e) Environmental hazards

ND

(f) Transport in bulk

ND

(g) Other Information

ND

SECTION 15: Regulatory information**SARA Reporting Requirements:**

ND

SARA Threshold Planning Quantity:

ND

TSCA Inventory Status:

ND

Other Federal Requirements:

ND

Other Canadian Regulations:

ND

State Regulatory Information:

ND

SECTION 16: Other information**PREPARED BY:** Kristofer Mainar**GAR QMS SDS REFERENCE:**

A331

HAZARDOUS MATERIAL IDENTIFICATION (HMIS) RATING:

2 Health
 3 Flammability
 0 Reactivity
 B Other

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RATING:

1 Health
 3 Flammability
 0 Reactivity
 Other

REVISION NUMBER: 170412**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

ABBREVIATIONS

NA Not Applicable
 ND Not Determined
 NE Not Established
 ppm parts per million

LD Lethal Dose
 TC Toxic Concentration
 TD Toxic Dose
 BOD Biological Oxygen Demand

G Gallon	COD Chemical Oxygen Demand
mg Milligram	Lo Lowest
L Liter	ThOD Theoretical Oxygen Demand
gm Gram	TLm Threshold Limit
mol Mole	IC Inhibitory Concentration
kg Kilogram	DOC Dissolved Organic Carbon
μ Micro	H Hours
mm Millimeter	M Months
p Pico	D Days
Pa Pascals	Y Years
c cento	W Weeks
LC Lethal Concentration	NOEL No Observed Effect Level
ACGIH American Conference of Governmental Industrial Hygienist	NOAEL No Observed Adverse Effect Level
CPR Controlled Product's Regulation	DSL Canadian Domestic Substances List
OSHA Occupational Safety and Health Administration	PEL Permissible Exposure Limit
NDSL Canadian Non-domestic Substance List	TLV Threshold Limit Value
IARC International Agency for Research for Cancer	

THIS MATERIAL SAFETY DATA SHEET IS PREPARED IN COMPLIANCE WITH FEDERAL REGULATIONS (29 CFR 1910.1200) OF CHEMICALS AND THE GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING REVISION 5. ANY APPLICABLE STATE AND LOCAL REGULATIONS SHOULD BE CONSULTED.

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