

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

Garreco Axcnt Orthodontic Liquid

(e) Emergency phone number

CHEMTREC 1-800-424-9300

(b) Other means of identification

NA

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

For professional dental applications.

(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. Methyl Methacrylate Monomer
2. Ethylene Glycol Dimethacrylate

(b) Label Elements**Hazard statements**

Causes skin irritation

Causes severe eye irritations

May cause an allergic skin reaction

May cause respiratory irritation. May cause drowsiness or dizziness.

Highly flammable liquid and vapor.

Precautionary statements

Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection

Avoid breathing dust/fume/gas/mist/vapors/spray

Contaminated work clothing should not be allowed out of the workplace

Use only outdoors or in a well-ventilated area

Keep away from heat/sparks/open flames/hot surfaces.--No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Keep cool

Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. Get medical attention if irritation occurs.

If skin irritation or rash occurs: Get medical advice/attention

IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

In case of fire: Use CO2, dry chemical, or foam for extinction.

Storage

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

Store locked up

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazard Symbol(s)

Flame
Exclamation mark

Signal Word(s)

Danger

(c) Other hazards which do not result in classification

Harmful to aquatic life with long lasting effects

Harmful to aquatic life

SECTION 3: Composition/information on ingredients**(a) Chemical(s) Identity:****(b) Common Name:****Mixture:****Concentration (Percentage)**

Safety Data Sheet

Form No. A413

Date Prepared: 2/15/2016

1. Methyl Methacrylate monomer
2. Ethylene Glycol Dimethacrylate

80-62-6 >90%
97-90-5 2.5 - 10%

SECTION 4: First-aid measures**(a) Description of first aid measures:**

IF IN EYES: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

IF ON SKIN (OR HAIR): Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Seek medical attention if irritation develops.

IF INHALED: Remove to fresh air. If rapid recovery does not occur, transport to nearest medical facility for additional treatment.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Seek medical advice.

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

Overexposure by inhalation may cause CNS depression-drowsiness, dizziness, confusion or loss of coordination. May cause skin and eye irritation. May cause allergic skin reaction. Will cause gastrointestinal tract irritation.

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

Note to Physicians: Treat symptomatically. Can cause allergic response in susceptible or hypersensitive individuals upon repeated or prolonged exposure.

SECTION 5: Fire-fighting measures**(a) Suitable extinguishing media:**

Foam, Dry Chemical, Carbon Dioxide.

Unsuitable Extinguishing Media: Water jet.

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

Vapors may travel to source of ignition and flash back.

Sensitivity to Static Discharge: Take precautionary measures against static discharge. Flammable mixtures of this product are readily ignited even by static discharge.

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

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6: Accidental release measures**(a) Personal precautions, protective equipment and emergency procedures:**

Personal Precautions: Wear protective clothing as described in Section 8 of this safety data sheet. Remove all sources of ignition. The wet contaminated surface may be slippery.

Environmental Precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). See section 12 for additional ecological information.

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

Methods for Containment: Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite).

Methods for Cleaning Up: Use clean non-sparking tools to collect absorbed material. Sweep up absorbed material and shovel into suitable containers for disposal. Discard any product, residue, disposable container or liner in full compliance with federal, state, and local regulations. For waste disposal, see section 13 of the SDS. Wash spill area with a mild detergent.

SECTION 7: Handling and storage

(a) Precautions for safe handling:

Advice on Safe Handling: Handle in accordance with good industrial hygiene and safety practice. Wear appropriate personal protective equipment. Wash face, hands, and any exposed skin thoroughly after handling. Keep away from heat/sparks/open flames/hot surfaces. --No smoking. Take precautionary measures against static discharges. Ground container and transfer equipment to eliminate static electric sparks. Use spark-proof tools and explosion-proof equipment. Avoid breathing vapors or mists. Contaminated work clothing should not be allowed out of the workplace. Use only in well-ventilated areas. Keep containers closed when not in use. Keep cool.

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

Storage Conditions: Keep container tightly closed and store in a cool, dry and well-ventilated place. Store between 16°-26°C (69°-79°F). Store locked up. Protect from damp. Store away from heat and incompatible materials.

Incompatible Materials: Organic peroxides, Reducing agent, Strong oxidizing agents.

SECTION 8: Exposure controls/Personal protection

(a) Control parameters:

1. Methyl Methacrylate	ACGIH TLV STEL: 100 ppm TWA: 50 ppm	OSHA PEL TWA: 100 ppm TWA: 410 mg/m ³ (vacated)	NIOSH IDLH IDLH: 1000 ppm TWA: 100 ppm TWA: 410 mg/m ³
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(b) Appropriate Engineering Controls:

Good ventilation is required.

(c) Individual protection measures:

EYE PROTECTION: Splash goggles or safety glasses.

SKIN AND BOODY PROTECTIONS: Polyethylene / Nitrile gloves. Do not use cotton gloves. Rubber boots. Polyethylene apron is recommended.

RESPIRATORY: Ensure adequate ventilation, especially in confined areas. Use NIOSH approved air-purifying respirator if the potential to exceed established exposure limits exists.

GENERAL HYGIENE CONSIDERATIONS: Handle in accordance with good industrial hygiene and safety practice.

SECTION 9: Physical and chemical properties

(a) Appearance:	Colorless or Pink liquid
(b) Odor:	Characteristic
(c) Odor threshold:	Not determined
(d) pH:	Not determined
(e) Melting point / freezing point:	Not determined
(f) Initial boiling point and boiling range:	100°C / 212°F @ 760 mm HG
(g) Flash point	8°C / 46.4°F Tag Closed Cup
(h) Evaporation rate (BuAc=1):	+1 (butyl acetate=1)
(i) Flammability:	Not determined
(j) Upper/lower flammability or explosive limits:	12 / 1.5%
(k) Vapor Pressure:	47hPa @ 20°C
(l) Vapor density:	+1 (Air=1)
(m) Relative density:	-1 (1=Water)
(n) Solubility:	Slightly soluble, Not determined in other solvents
(o) Partition coefficient: n-octanol/water:	Not determined
(p) Auto-ignition temperature:	430°C / 806°F
(q) Decomposition temperature:	Not determined
(r) Viscosity:	Not determined

SECTION 10: Stability and reactivity

- (a) **Reactivity:** Not reactive under normal conditions.
- (b) **Chemical stability:** Stable under recommended storage conditions.
- (c) **Possibility of hazardous reactions:** Prolonged exposure to elevated temperatures which can cause premature polymerization and release methyl methacrylate vapors.
- (d) **Conditions to avoid:** Temperatures >35°C (95°F).
- (e) **Incompatible Materials:** Organic peroxides, Reducing agent, Metallic Redox systems, Strong oxidizing agents.
- (f) **Hazardous decomposition products:** None known based on information supplied

SECTION 11: Toxicological information

Acute toxicity	Yes
Skin corrosion/irritation	Causes skin irritation. May cause allergic skin reaction.
Serious Eye Damage / Irritation	Causes serious eye irritation.
Respiratory or skin sensitization	May cause irritation to the mucous membranes and upper respiratory tract.
Germ cell mutagenicity	Not determined
Carcinogenicity	Methyl Methacrylate Monomer - IARC - Group 3
Reproductive toxicity	Not determined
STOT-single exposure	May cause respiratory irritation. May cause drowsiness or dizziness.
STOT-repeated exposure	Not determined
Aspiration Hazard	Not determined

- (a) **Exposure route:** Please see above for normal exposure routes.
- (b) **Symptoms related to the physical, chemical and toxicological characteristics:**
Please see section 4 of this SDS for symptoms.
- (c) **Delayed and immediate effects and also chronic effects from short and long term exposure:**
Please see above for effects.
- (d) **Numerical measures of toxicity:**
- Oral LD50** >7872 mg/kg (rat)
Dermal LD50 >5 g/kg (rabbit)
Inhalation LC50 4632 ppm (rat) 4 h, 400 ppm (rat) 1 hr

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

1.Methyl Methacrylate	Aquatic Plants	Fish	Crustacea
		243-275: 96 h Pimephales promelas mg/L LC50 flow-through 125.5-190.7: 96 h Pimephales promelas mg/L LC50 static 170-206: 96 h Lepomis macrochirus mg/L LC50 flow-through 153.9-341.8: 96 h Lepomis macrochirus mg/L LC50 static 79: 96 h Oncorhynchus mykiss mg/L LC50 static 326.4-426-9: 96 h Poecilia reticulata mg/L LC 50 static	69: 48 h Daphnia magna mg/L EC50
	170: 96h Pseudokirchneriella subcapitata mg/L EC50		

- (b) **Persistence and degradability:** Not determined
- (c) **Bioaccumulative potential** Not determined
- (d) **Mobility in soil:** Not determined
- (e) **Other adverse effects:** Methyl Methacrylate Monomer - Partition Coefficient: 0.7
Not determined

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

Disposal of Wastes: Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging: Disposal should be in accordance with applicable regional, national and local laws and regulations.

Methyl Methacrylate - RCRA: U162 - RCRA - Basis for Listing: Included in waste stream: F039 - **RCRA - U Series Wastes: U162**

California Hazardous Waste Status: Toxic, ignitable

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

UN1247

(b) UN Proper shipping name

Methyl methacrylate monomer, stabilized

(c) Transport hazard class(es)

3

(d) Packing Group

II

(e) Environmental hazards

Not determined

(f) Transport in bulk

Not determined

(g) Other Information

Not determined

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

Yes

SARA Threshold Planning Quantity:

1.00%

TSCA Inventory Status:

Not determined

Other Federal Requirements:

CERCLA - Hazardous Substances RQs: 1000 lb - Reportable Quantity: RQ
1000 lb final RQ, RQ 454 kg final RQ
CWA - CWA - Reportable Quantities: 1000 lb

Other Canadian Regulations:

Not determined

State Regulatory Information:

U.S. State Right-to-Know Regulations: New Jersey, Massachusetts,
Pennsylvania

SECTION 16: Other information**PREPARED BY:** Kathryn Harris**GAR QMS SDS REFERENCE:** A398**HAZARDOUS MATERIAL IDENTIFICATION (HMIS) RATING:**

Health	Not determined
Flammability	Not determined
Reactivity	Not determined
Other	Not determined

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAZARD IDENTIFICATION RATING:

Health	Not determined
Flammability	Not determined
Reactivity	Not determined
Special Information	Not determined

REVISION NUMBER: 160215**CHANGES FROM PREVIOUS VERSION:**

INITIAL VERSION

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 cent

LC Lethal Concentration

ACGIH American Conference of Governmental Industrial Hygienist

CPR Controlled Product's Regulation

NDSL Canadian Non-domestic Substance List

IARC International Agency for Research for Cancer

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

NOAEL No Observed Adverse Effect Level

DSL Canadian Domestic Substances List

PEL Permissible Exposure Limit

TLV Threshold Limit Value

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. 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.