SAFETY DATA SHEETS

This SDS packet was issued with item:

070852160

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

070852152 070852251 070852269

Patterson Denture Base Liquid (#1)

Material Safety Data Sheet

Section I - Company Information

Manufacturer: **Patterson Companies, Inc.**
1031 Mendota Heights Road
St. Paul, MN 55120

24-hour Emergency Response Number: 800.424.9300
Tel: 800.328.5536; Fax: 651.686.9331
www.pattersoncompanies.com

Section II - Hazardous Ingredients/Identity Information

Hazardous Components		OSHA PEL	ACGIH TLV	Other Limits Recommended
Ethylene Glycol Din	97-90-5	NE	NE	
Methyl Methacrylate	80-62-6	100 ppm	100 ppm	

Section III - Physical/Chemical Characteristics

Boiling Point: 101°C, 214°F
Specific Gravity (H_20=1): 0.94
Vapor Pressure (mm Hg.): 29 mm Hg @ 20°C, 68°F
Melting Point: N/A
Vapor Density (AIR=1): 3.5 @ 60°F, 16°C
Evaporation Rate (Butyl Acetate =1): 3.0
Solubility in Water: Moderate 1.6gm/100 gms @ 20°C, 214°F
Appearance and Odor: Clear, pale liquid, with an acrid fruity odor

Section IV - Fire and Explosion Hazard Data

Flash Point : 10°C, 51°F
Flammable Limits LEL: 2.12 UEL: 12.5
Extinguishing Media: Chemical foam, carbon dioxide, dry chemical.
Unusual Fire and Explosion Hazards: When heated above the flashpoint, flammable vapors are emitted and can mix with air and burn, or become explosive. Vapor is heavier than air and may travel to the source of ignition and flash back.
Special Fire Fighting Procedures: Wear self contained breathing apparatus and full protective gear. Use water spray to cool containers. EXPLOSION HAZARD-fight fire from protected location.

Section V - Reactivity Data

Stability: Unstable
Conditions to Avoid: Heating above 70°F, 21°C and sources of ignition aging and contamination.
Incompatibility: Reducing and oxidizing agents and UV light. Material has strong solvent properties.
Hazardous Decomposition or By-products: Oxides of carbon when burned.
Hazardous Polymerization: May Occur
Conditions to Avoid: Temperature above 70°F, 21°C, oxidizing or reducing agents, peroxides, acids, alkalies, and amines.

Section VI - Health Hazard Data

Route(s) of Entry: Inhalation? Yes Skin? Yes Ingestion? Yes
Health Hazards: Acute; Harmful if swallowed, inhaled or absorbed through skin. Causes severe eye irritation. Chronic; Prolonged contact may cause eye damage. May cause severe burns or irritation.
Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No
Signs and Symptoms of Exposure: Headache, nausea, staggering gait, confusion, drowsiness, and unconsciousness.
Medical Conditions Generally Aggravated by Exposure: NAIF
Emergency and First Aid Procedures: Inhalation: Remove to fresh air. If breathing has stopped, give oxygen. Eyes: Flush with water, including under the eyelids. Skin: Wash thoroughly with soap and water. Ingestion: Do not induce vomiting. Dilute with 2 glasses of water. Clothing: Wash thoroughly before reuse.

Section VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled: Evacuate area. Eliminate sources of ignition. Use self-contained breathing apparatus and protective clothing. Dike and absorb with inert material. Transfer to proper containers for disposal, use non-sparking tools. Contaminated monomer may be unstable, add inhibitor to prevent polymerization. Keep spills and cleaning runoffs out of sewers and open bodies of water.
Waste Disposal Method: When discarded it is listed as a hazardous waste by the EPA under RCRA U-164 with the reportable quantity (RQ) of 1000 lbs. Incinerate liquid and diking material after addition of excess inhibitor, in accordance with Federal, State, and Local regulations.
Precautions to Be Taken in Handling and Storing: Observe precautions found on the label. Store in cool, dry place away from heat, sparks, flame, and direct sunlight. Close containers after each use. Ground all metal containers when transferring. Check inhibitor levels every 3 months.
Other Precautions: Wash face and hands thoroughly with soap and water after handling and before eating.

Section VIII - Control Measures

Respiratory Protection: Use self-contained breathing apparatus when level exceeds 100 ppm.
Ventilation Local Exhaust: Recommended Special: NAIF
Mechanical (General): NAIF Other: NAIF
Protective Gloves: Impervious Eye Protection: Safety glasses or chemical splash goggles
Other Protective Clothing or Equipment: Protective creams used for ease of clean up.
Work/Hygienic Practices: N/A

Patterson Product Codes: 070852152, 070852160, 070852251, 070852269

Date Prepared: 05/12/2011

PATTERSON COMPANIES, INC.

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

(a) GHS product identifier
Patterson Liquid #1 - For Premium Denture Base

(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
Patterson Companies, Inc
1031 Mendota Heights Road
Saint Paul, MN 55120
Phone: 1-800-328-5536

SECTION 2: Hazards identification

(a) GHS classification of the substance/mixture

Substance Name	
1. Methacrylate Monomer	Flam. Liq. 2 STOT SE 3 Skin Irrit. 2 Skin Sens. 1
2. Ethylene Glycol Dimethacrylate	STOT SE 3 Skin Sens. 1
3. Inhibitor	ND

(b) Label Elements

Hazard Statements
Highly flammable liquid and vapor May cause respiratory irritation Causes skin irritation
May cause an allergic skin reaction

Precautionary statements

Prevention

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

SECTION 2: Hazards identification (cont.)

Response

IF ON SKIN (or hair): Take off immediately all contaminated clothing and wash it before reuse. Rinse skin with water.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

Call a POISON CENTER or doctor if you feel unwell.

In case of fire: Use chemical foam, carbon dioxide, or dry chemical to extinguish.

Storage

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

Store locked up.

Disposal

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

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

(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)**
Methyl Methacrylate Monomer	80-62-6	60.0-100.0
Ethylene Glycol Dimethacrylate	97-90-5	0.0-20.0
Inhibitor	NA	<1%

SECTION 4: First-aid measures

(a) Description of first aid measures:

IF ON SKIN (or hair): If irritation occurs and product is on the skin, rinse thoroughly with lukewarm water, followed by a thorough washing of the effected area with soap and water. If irritation, redness or swelling persists, contact a physician immediately.

IF INHALED: Remove to fresh air. Seek immediate medical attention.

IF SWALLOWED: If ingested, do not induce vomiting. If product has been swallowed, drink plenty of water or milk IMMEDIATELY. If the patient is vomiting, continue to offer water or milk. Never give anything by mouth to an unconscious person. Provide an estimate of the time at which the material was ingested and the amount of the substance that was swallowed. Get medical attention immediately.

IF IN EYES: If product gets in the eyes, flush with copious amounts of lukewarm water for at least 15 minutes. If irritation occurs, contact a physician.

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

ON SKIN: May cause skin irritation and sensitization.

IN EYES: Liquid and vapors can cause moderate irritation. Symptoms may include tears, blurred vision and redness.

INHALATION: High concentration is irritating to the respiratory tract and may cause dizziness, headache and anesthetic effects.

INGESTION: Causes irritation, a burning sensation of the mouth, throat and gastrointestinal tract and abdominal pain.

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

INHALATION: Dizziness, headache and anesthetic effects.
INGESTION: Burning sensation of the mouth, throat and gastrointestinal tract and abdominal pain.

SECTION 5: Fire-fighting measures

(a) Suitable extinguishing media:

Chemical foam, carbon dioxide, dry chemical.

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

High temperatures, inhibitor depletion, accidental impurities, or exposure to radiation or oxidizers may cause spontaneous polymerizing reaction generating heat/pressure. Closed containers may rupture or explode during a runaway polymerization. Use a water spray or fog to reduce or direct vapors. Water may not be effective in actually extinguishing a fire involving this product.

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

This product is a flammable liquid. When involved in a fire, this product may ignite readily and decompose to produce carbon oxides. Vapors of this product are heavier than air and may travel to a source of ignition and flash back to a leaking or open container. Do not enter fire area without proper protection. Fight fire from a safe location. Heat/impurities may cause pressure to build and/or rupture closed containers, spreading fire, increasing risk of burns/injuries. Structural firefighters must wear SCBAs and full protective equipment.

SECTION 6: Accidental release measures

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

Maximize ventilation (open doors and windows) and secure all sources of ignition. Place into appropriate closed container(s) for disposal in accordance with local, state and federal regulations. Wash all affected areas with plenty of warm water and soap. Remove any contaminated clothing and wash thoroughly before reuse.

(b) Environmental precautions:

Keep spills and cleaning runoffs out of municipal sewers and open bodies of water.

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

Before cleaning any spill or leak, individuals involved must wear appropriate Personal Protective Equipment (e.g., goggles, gloves). Deny entry to all unprotected individuals. Dike and contain spill with inert material (e.g. sand or earth). Use ONLY non-sparking tools for recovery and cleanup.

SECTION 7: Handling and storage

(a) Precautions for safe handling:

Use local explosion-proof ventilation with a minimum capture velocity of 100 ft/min (30 m/min) at point of material release. Refer to Industrial Ventilation: A Manual of Recommended Practice published by the American Conference of Governmental Hygienist. Observe precautions found on label. Avoid contact with skin, eyes, clothing, and prolonged contact with the product. Use good personal hygiene and housekeeping. After use, wash hands and exposed skin with soap and water. Do not eat, drink or smoke while handling product.

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

Store containers in a cool, dry location, away from direct sunlight, heat, sparks, flame, other light sources, or sources of intense heat. Keep container closed after each use. Ground and bond all containers when transferring. Check inhibitor levels periodically, add to the bulk material if needed. Maintain at a minimum, the original 2-inch headspace in the product container. Do not blanket or mix with oxygen-free gas as it renders the inhibitor ineffective. Incompatibilities include strong oxidizers, strong reducers, free radical initiators, inert gases, and oxygen scavengers. Material has strong solvent properties and can soften paint and rubber.

controls/Personal protection

(a) Control parameters:

	ACGIH		OSHA	
Chemical	**TLV**	**TLV-STEL**	**PEL TWA**	**PEL CEILING**
Methyl Methacrylate Monomer	100ppm	NE	100 ppm	NE
Ethylene Glycol Dimethacrylate	NE	NE	NE	NE

(b) Appropriate Engineering Controls:

Use explosion-proof local exhaust at processing equipment, including buffers, sanders, grinders and polishers. High temperature processing equipment should be well ventilated.

(c) Individual protection measures:

RESPIRATORY: A respirator should be worn whenever workplace conditions warrant a respirators use. None required if airborne concentrations are maintained below the exposure limit listed in Section 2. If necessary, use only respiratory protection authorized per U.S. OSHA's requirement in 29 CFR §1910.134 or other appropriate governing standard.

EYE PROTECTION: Depending on the use of this product, splash or safety glasses may be worn. If necessary, refer to U.S. OSHA 29 CFR §1910.133, or other appropriate governing standard. Ensure that an eyewash station, sink or washbasin is available in case of exposure to eyes.

PROTECTIVE GLOVES: If anticipated that prolonged & repeated skin contact will occur during use of this product, wear chemical resistant gloves for routine industrial use. If necessary, refer to U.S. OSHA 29 CFR §1910.138, or other appropriate governing standards.

SECTION 8: Exposure controls/Personal protection (cont.)

OTHER PROTECTIVE EQUIPMENT: No special body protection is required under typical circumstances of use and handling. If necessary, refer to appropriate governing standards. An eyewash station and a safety shower are recommended.

SECTION 9: Physical and chemical properties

(a) Appearance:	Clear liquid.
(b) Odor:	Acrid odor.
(c) Odor threshold:	ND
(d) pH:	NA
(e) Melting point / freezing point:	-48 °C
(f) Initial boiling point and boiling range:	101 °C, 214 °F
(g) Flash point	11.5 °C, 52.7 °F
(h) Evaporation rate (BuAc=1):	3.1
(i) Flammability:	Highly flammable.
(j) Upper/lower flammability or explosive limits:	12.5 / 2.12
(k) Vapor Pressure:	28 mm Hg @ 20 °C, 68 °F
(l) Vapor density:	3.5 @ 15.5 °C, 60 °F
(m) Relative density:	0.949 g/ml @ 15.5°C
(n) Solubility:	Moderate, 1.6 WT% @ 20 °C, 68 °F
(o) Partition coefficient: n-octanol/water:	ND
(p) Auto-ignition temperature:	421 °C, 790 °F
(q) Decomposition temperature:	ND
(r) Viscosity:	Like water.

SECTION 10: Stability and reactivity

(a) Reactivity:	Unstable/Reactive upon depletion of inhibitor and/or heat. Unstable/
(b) Chemical stability:	Reactive upon depletion of inhibitor and/or heat. Hazardous
(c) Possibility of hazardous reactions:	polymerization may occur.
(d) Conditions to avoid:	Avoid temperatures above 21 °C, 70 °F, localized heat sources (i.e., drum/band heaters), oxidizing conditions, freezing conditions, direct sunlight, ultraviolet radiation, and inert gas blanketing.
(f) Hazardous decomposition products:	Oxides of Carbon when burned.

SECTION 11: Toxicological information

Acute toxicity	There are extensive toxicological data available on the components of this product. An adequate representation of all these data is beyond the scope of this document.
Skin corrosion/irritation	NE
Serious Eye Damage / Irritation	NE
Respiratory or skin sensitization	Acute Dermal Rabbit LD50: >35,500 mg/kg.
Germ cell mutagenicity	NE
Carcinogenicity	NE
Reproductive toxicity	NE
STOT-single exposure	NE
STOT-repeated exposure	Nose, Liver, and Kidneys (long-term to high levels).
Aspiration Hazard	Inhalation Rat LC50: 7094 ppm/4H

(a) Exposure route:

Inhalation, Skin, or Eyes.

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

Tears, blurred vision, and redness. May cause skin irritation and can cause skin sensitization. High concentration irritating to the respiratory tract and may cause dizziness, headache, and anesthetic effects. Can also cause irritation, burning sensation of the mouth, and throat/gastrointestinal tract and abdominal pain.

SECTION 11: Toxicological information (cont.)

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

Prolonged and/or repeated exposure of may lead to kidney, lung, liver, and heart damage. None of these effects are likely to occur in humans provided exposure is maintained at/below the occupational exposure limit. Unlikely to present a cancer hazard to humans.

(d) Numerical measures of toxicity:

Acute Dermal Rabbit LD50: >35,500 m
Inhalation Rat LC50: 7094 ppm/4H
Oral Rat, LD50: 7900 mg/kg

SECTION 12: Ecological information

(a) Ecotoxicity:

Fathead Minnows, LC50: 130 mg/L, 96H.
Fish, LC50: >100mg/L.
Algae, EC50: 170mg/L, 96H.

(b) Persistence and degradability:

28 Day Biodegradation Study: Not readily biodegradable.
COD: 88% within 28 days.
Inherent Biodegradation: DOC Removal >95% within 28 days.

(c) Bioaccumulative potential

ND

(d) Mobility in soil:

High.

(e) Other adverse effects:

ND

SECTION 13: Disposal considerations

Product: Methyl Methacrylate

Recommendation

WASTE DISPOSAL METHOD: When discarded it is a hazardous waste by the EPA under RCRA. The reportable quantity (RQ) for Methyl Methacrylate is 1000 pounds (40 CFR Part 302). After addition of excess inhibitor, dispose waste material in accordance with Federal, State, and Local regulations.

DISPOSAL OF EMPTY CONTAINERS: Reuse of empty drums or containers is not recommended. Employees should be advised of the potential hazards, due to residual flammable material, associated with empty containers. Dispose of all empty containers properly, in accordance with Federal, State, and Local regulations.

SECTION 14: Transport information

(a) UN Number

UN 1247

(b) UN Proper shipping name

Methyl Methyl methacrylate Monomer, Stabilized, Solution.

(c) Transport hazard class(es)

3

(d) Packing Group

II

(e) Environmental hazards

Not listed as a marine pollutant.

(f) Transport in bulk

US CFR 49 §173.242

(g) Other Information

Label as Flammable Liquid.

SECTION 15: Regulatory information

SARA Reporting Requirements:
There are reporting requirements for this product.
SARA Threshold Planning Quantity:
There are no specific Threshold Planning Quantities for the components of this product.
TSCA Inventory Status:
The components of this product are listed on the TSCA Inventory.
Other Federal Requirements:
This material is considered Hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)
Other Canadian Regulations:
The components of this product are listed on the DSL.
State Regulatory Information:
This product may contain components that are covered under specific state criteria.

SECTION 16: Other information

PREPARED BY: Kathryn Harris
GAR QMS SDS REFERENCE: A153

HAZARDOUS MATERIAL IDENTIFICATION (HMIS) RATING:

Health	2
Flammability	3
Reactivity	2
Other	NA

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAZARD IDENTIFICATIN RATING:

Health	2
Flammability	3
Reactivity	2
Special Information	NA

REVISION NUMBER: 150403

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 cento
LC Lethal Concentration
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

SECTION 16: Other information (cont.)

ACGIH American Conference of Governmental Industrial Hygienist
CPR Controlled Product's Regulation
DSL Canadian Domestic Substances List
NDSL Canadian Non-domestic Substance List
IARC International Agency for Research for Cancer
NOEL No Observed Effect Level
NOAEL No Observed Adverse Effect Level
OSHA Occupational Safety and Health Administration
PEL Permissible Exposure Limit
TLV Threshold Limit Value

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.

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Patterson Denture Base Liquid (#1)

SECTION 1: Identification

Product identifier

Product name: Patterson Denture Base Liquid (#1)
Product code: 070852152, 070852160, 070852251, 070852269

Recommended use of the product and restriction on use

Relevant identified uses: For professional dental applications.
Uses advised against: Not determined or not applicable.
Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Manufacturer:
Supplier
Patterson Companies, Inc.
1031 Mendota Heights Road
St. Paul, MN 55120
1-800-328-5536 Fax:1-651-686-9331

Emergency telephone number:

United States
CHEMTREC
Within USA and Canada: 1-800-424-9300 (CHEMTREC, 24 hours)
Outside USA and Canada: +1-703-527-3887 (CHEMTREC, 24 hours)

SECTION 2: Hazard(s) identification

GHS classification:

Flammable liquids, category 2
Skin irritation, category 2
Skin sensitization, category 1
Specific target organ toxicity - single exposure, category 3, respiratory irritation

Label elements

Hazard pictograms:

Signal word: Danger

Hazard statements:

H225 Highly flammable liquid and vapor
H315 Causes skin irritation
H317 May cause an allergic skin reaction
H335 May cause respiratory irritation

Precautionary statements:

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking
P233 Keep container tightly closed
P240 Ground/bond container and receiving equipment
P241 Use explosion-proof electrical/ventilating/light/equipment
P242 Use only non-sparking tools
P243 Take precautionary measures against static discharge
P280 Wear protective gloves/protective clothing/eye protection/face protection
P264 Wash skin thoroughly after handling
P261 Avoid breathing dust/fume/gas/mist/vapors/spray
P272 Contaminated work clothing should not be allowed out of the workplace
P271 Use only outdoors or in a well-ventilated area
P303+P361+P353 If on skin (or hair): Immediately remove/take off all contaminated clothing. Rinse skin with water/shower
P370+P378 In case of fire: Use agents recommended in section 5 for extinction
P321 Specific treatment (see supplemental first aid instructions on this label).
P362 Take off contaminated clothing and wash before reuse
P302+P352 If on skin: Wash with soap and water
P333+P313 If skin irritation or a rash occurs: Get medical advice/attention
P304+P340+P312 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
P405 Store locked up
P403+P233 Store in a well ventilated place. Keep container tightly closed
P501 Dispose of contents and container as instructed in Section 13

Hazards not otherwise classified: None

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: N/A	Inhibitor	<1
CAS number: 80-62-6	Methyl Methacrylate	>60
CAS number: 97-90-5	Ethylene Dimethylacrylate	<20

Additional Information: None

SECTION 4: First aid measures

Description of first aid measures

General notes:

Not determined or not applicable.

After inhalation:

Loosen clothing as necessary and position individual in a comfortable position
Maintain an unobstructed airway
Get medical advice/attention if you feel unwell
Take precautions to ensure your own safety
Remove source of exposure or move person to fresh air
Get medical advice if you feel unwell or concerned

After skin contact:

Rinse affected area with soap and water
If symptoms develop or persist, seek medical attention
Take off all contaminated clothing
Gently blot or brush away excess product
Wash with plenty of lukewarm, gently flowing water
Get medical advice if skin irritation occurs or you feel unwell

After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes
If symptoms develop or persist, seek medical attention

After swallowing:

Rinse mouth thoroughly
Seek medical attention if irritation, discomfort, or vomiting persists

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Not determined or not applicable.

Delayed symptoms and effects:

Not determined or not applicable.

Immediate medical attention and special treatment

Specific treatment:

Not determined or not applicable.

Notes for the doctor:

Not determined or not applicable.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media:

Use Water (fog only), dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam

Unsuitable extinguishing media:

Not determined or not applicable.

Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors
Vapors can flow to distant ignition sources and flashback
Liquid is volatile and may generate an explosive atmosphere
May form corrosive mixtures with water

Special protective equipment for firefighters:

Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit

Special precautions:

Shut off sources of ignition
Carbon monoxide and carbon dioxide may form upon combustion
Heating causes a rise in pressure, risk of bursting and combustion

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation
Ensure air handling systems are operational
Wear protective eye wear, gloves and clothing
Beware of vapors accumulating to form explosive concentrations

Vapors can accumulate in low areas

Environmental precautions:

Should not be released into the environment
Prevent from reaching drains, sewer or waterway

Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing
Use spark-proof tools and explosion-proof equipment
Absorb with non-combustible liquid-binding material (sand, diatomaceus earth (clay), acid binders, universal binders)
Dispose of contents / container in accordance with local regulations

Reference to other sections:

Not determined or not applicable.

SECTION 7: Handling and storage

Precautions for safe handling:

Use only with adequate ventilation.
Avoid breathing mist or vapor.
Do not eat, drink, smoke or use personal products when handling chemical substances.
Take precautionary measures against electrostatic discharges.
Use only non-sparking tools.

Conditions for safe storage, including any incompatibilities:

Keep container tightly sealed.
Protect from freezing and physical damage.
Store in a cool, well-ventilated area.
Store away from all ignition sources (open flames, hot surfaces, direct sunlight, spark sources).

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
United States (OSHA)	Methyl Methacrylate	80-62-6	8 hr Time Weighted Avg (TWA): 410 mg/m3
NIOSH	Methyl Methacrylate	80-62-6	8 hr Time Weighted Avg (TWA): 410 mg/m3

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Information on monitoring procedures:

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls.
Biological monitoring may also be appropriate for some substances.

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.
Use explosion-proof ventilation equipment.

Personal protection equipment

Eye and face protection:
Safety goggles or glasses, or appropriate eye protection.

Skin and body protection:
Select glove material impermeable and resistant to the substance.
Wear appropriate clothing to prevent any possibility of skin contact.

Respiratory protection:
If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

General hygienic measures:
Avoid contact with skin, eyes and clothing.
Wash hands before breaks and at the end of work.
Wash contaminated clothing before reuse.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Clear liquid
Odor	Not determined or not available.
Odor threshold	Not determined or not available.
pH	Not determined or not available.
Melting point/freezing point	-48 °C
Initial boiling point/range	101 °C, 214 °F
Flash point (closed cup)	11.5 °C, 52.7 °F
Evaporation rate	3.1
Flammability (solid, gas)	Highly flammable
Upper flammability/explosive limit	2.12
Lower flammability/explosive limit	12.5
Vapor pressure	28 mm Hg @ 20 °C, 68 °F
Vapor density	3.5 @ 15.5 °C, 60 °F
Density	Not determined or not available.
Relative density	0.949 g/ml @ 15.5°C
Solubilities	Not determined or not available.
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	421 °C, 790 °F
Decomposition temperature	Not determined or not available.
Dynamic viscosity	Not determined or not available.
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

Other information

SECTION 10: Stability and reactivity

Reactivity:
Does not react under normal conditions of use and storage.

Patterson Denture Base Liquid (#1)

Chemical stability:
Stable under normal conditions of use and storage.

Possibility of hazardous reactions:
None under normal conditions of use and storage.

Conditions to avoid:
None known.

Incompatible materials:
None known.

Hazardous decomposition products:
None known.

SECTION 11: Toxicological information

Acute toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Route	Result
Methyl Methacrylate	oral	LD50 - Rat - 7870 mg/kg
	dermal	LD50 -Rabbit - > 5000 mg/kg
	inhalation	LC50 - Rat - 78 mg/l - 4h
Ethylene Dimethylacrylate	oral	LD50 - Rat - 3300 mg/kg

Skin corrosion/irritation

Assessment: Causes skin irritation

Product data:

No data available.

Substance data: No data available.

Serious eye damage/irritation

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Respiratory or skin sensitization

Assessment: May cause an allergic skin reaction

Product data:

No data available.

Substance data:

Name	Result
Ethylene Dimethylacrylate	May cause an allergic skin reaction.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

International Agency for Research on Cancer (IARC): None of the ingredients are listed.

National Toxicology Program (NTP): None of the ingredients are listed.

Germ cell mutagenicity

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Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Reproductive toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Specific target organ toxicity (single exposure)

Assessment: May cause respiratory irritation

Product data:

No data available.

Substance data:

Name	Result
Ethylene Dimethylacrylate	May cause respiratory irritation.

Specific target organ toxicity (repeated exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Information on likely routes of exposure:

No data available.

Symptoms related to the physical, chemical and toxicological characteristics:

No data available.

Other information:

No data available.

SECTION 12: Ecological information

Acute (short-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Result
Methyl Methacrylate	LC50 - Fish - 130 - 460 mg/l - 96 h

Chronic (long-term) toxicity

Product data: No data available.

Substance data: No data available.

Persistence and degradability

Product data: No data available.

Substance data: No data available.

Bioaccumulative potential

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Product data: No data available.
Substance data: No data available.

Mobility in soil

Product data: No data available.
Substance data: No data available.

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

SECTION 14: Transport information

United States Transportation of dangerous goods (49 CFR DOT)

UN number	UN1247
UN proper shipping name	Methyl Methyl methacrylate Monomer, Stabilized, Solution.
UN transport hazard class(es)	3 
Packing group	II
Environmental hazards	None
Special precautions for user	None

International Maritime Dangerous Goods (IMDG)

UN number	UN1247
UN proper shipping name	Methyl Methyl methacrylate Monomer, Stabilized, Solution.
UN transport hazard class(es)	3 
Packing group	II
Environmental hazards	None
Special precautions for user	None

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	UN1247
UN proper shipping name	Methyl Methyl methacrylate Monomer, Stabilized, Solution.
UN transport hazard class(es)	3 
Packing group	II
Environmental hazards	None
Special precautions for user	None

SECTION 15: Regulatory information

United States regulations

Patterson Denture Base Liquid (#1)

Inventory listing (TSCA):

80-62-6	Methyl Methacrylate	Listed
97-90-5	Ethylene Dimethylacrylate	Listed

Significant New Use Rule (TSCA Section 5): Not determined.

Export notification under TSCA Section 12(b): Not determined.

SARA Section 302 extremely hazardous substances: Not determined.

SARA Section 313 toxic chemicals:

80-62-6	Methyl Methacrylate	Listed
97-90-5	Ethylene Dimethylacrylate	Not Listed

CERCLA:

80-62-6	Methyl Methacrylate	Listed	1000 lbs

RCRA:

80-62-6	Methyl Methacrylate	Listed	U162

Section 112(r) of the Clean Air Act (CAA): Not determined.

Massachusetts Right to Know:

80-62-6	Methyl Methacrylate	Listed
97-90-5	Ethylene Dimethylacrylate	Not Listed

New Jersey Right to Know:

80-62-6	Methyl Methacrylate	Listed
97-90-5	Ethylene Dimethylacrylate	Not Listed

New York Right to Know:

80-62-6	Methyl Methacrylate	Listed
97-90-5	Ethylene Dimethylacrylate	Not Listed

Pennsylvania Right to Know:

80-62-6	Methyl Methacrylate	Listed
97-90-5	Ethylene Dimethylacrylate	Not Listed

California Proposition 65: None of the ingredients are listed.

SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with OSHA HCS 2012 guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

NFPA: 2-3-2-0

HMIS: 2-3-2-0

Initial preparation date: 11.28.2017

End of Safety Data Sheet