

MATERIAL SAFETY DATA SHEET

Date Issued: 12/18/2008
 MSDS No: LS1001
 Date Revised: 12/18/2008
 Revision No: 1

TruAcrylic™ Monomer Orthodontic Acrylic Liquids

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: TruAcrylic™ Monomer Orthodontic Acrylic Liquids
PRODUCT DESCRIPTION: Colored Monomer
PRODUCT CODE: PRP61XX-08; PO33-200XX; PO33-19822/P; PO33-19822/C
CHEMICAL FAMILY: Methacrylate
MOLECULAR FORMULA: Not Available
GENERIC NAME: Orthodontic Acrylic Liquid

MANUFACTURER

Ortho Technology, Inc.
 17401 Commerce Park Boulevard
 Tampa FL 33647
Product Stewardship: 1-800-999-3161

2. COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENT(S)	CAS	% BY WEIGHT
Methyl Methacrylate	80-62-6	60 - 100
Other Esther Addducts	NR	< 0.1 - 1
Inhibitor: Hydroquinone (HQ)	123-31-9	< 0.1 - 1

See Section 8 for Exposure Limits

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Liquid - various colors

POTENTIAL HEALTH EFFECTS

EYES: Severely irritating possible corneal injury.

SKIN: Severely irritating to the skin.

INHALATION: Vapor or mist can irritate the nose and throat. Extended exposure will lead to headache, nausea, drowsiness and unconsciousness.

HEALTH HAZARDS: DELAYED EFFECTS: Prolongs or repeated exposure can cause liver and kidney damage and allergic reaction to skin.

4. FIRST AID MEASURES

EYES: IMMEDIATELY get under a safety shower. Flush eyes with water while removing contaminated clothing and flooding exposed skin areas with water. Seek medical attention.

SKIN: Remove contaminated clothing promptly and wash affected skin areas with soap and water.

MATERIAL SAFETY DATA SHEET

Date Issued: 12/18/2008

MSDS No: LS1001

Date Revised: 12/18/2008

Revision No: 1

TruAcrylic™ Monomer Orthodontic Acrylic Liquids

INGESTION: If swallowed, dilute by giving 2 glasses of water to drink. Seek medical attention. Never give anything by mouth to an unconscious person.

INHALATION: Move subject to fresh air. Give Artificial respiration if breathing has stopped. Seek medical attention.

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: 49F SFCC

FLAMMABLE LIMITS: 2.12% to 12.5%

AUTOIGNITION TEMPERATURE: 815F

EXTINGUISHING MEDIA: Use alcohol foam, carbon dioxide, dry chemical or water spray when fighting fires involving this material.

EXPLOSION HAZARDS: Heated sealed containers can explode.

FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear. Use water to cool containers. Fight fire from protected location. EXPLOSION HAZARD

FIRE FIGHTING EQUIPMENT: Wear self-contained breathing apparatus

HAZARDOUS DECOMPOSITION PRODUCTS: Heat can cause polymerization.

6. ACCIDENTAL RELEASE MEASURES

ENVIRONMENTAL PRECAUTIONS

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

LAND SPILL: Spills on porous surfaces can contaminate groundwater.

GENERAL PROCEDURES: Keep spectators away. Eliminate ignition sources. Use self-contained breathing apparatus (pressure - demand, MSHA/NIOSH approved), impervious clothing and boots. Dike and contain spill with inert material (e.g. sand, earth). Transfer liquid to containers for recovery or disposal and solid diking material to separate containers for disposal. Contaminated monomer may be unstable. Add extra inhibitor to prevent polymerization.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Ground all containers when transferring material. It is advisable to use material within 6 months. Material stored in bulk should be tested for stability every month; drums and pails every 3 months

HANDLING: Keep away from heat and flame.

STORAGE: Store out of direct sunlight at ambient temperatures. Limit indoor storage of flammable liquids to approved areas equipped with automatic sprinklers. Leave air space over liquid surface in all containers. It is advisable to use material within six months. Monitor inhibitor level during storage using CM-18. Materials stored in bulk should be tested for stability every month; drums and pails every three

MATERIAL SAFETY DATA SHEET

Date Issued: 12/18/2008

MSDS No: LS1001

Date Revised: 12/18/2008

Revision No: 1

TruAcrylic™ Monomer Orthodontic Acrylic Liquids

months.

STORAGE TEMPERATURE: Maximum storage temperature is ambient. Monomer stability is a logarithmic function of time vs. temperature. Stability is also dependent on inhibitor concentration, the presence of air and type of monomer.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

HAZARDOUS COMPONENTS					
		EXPOSURE LIMITS			
		OSHA PEL		ACGIH TLV	
Chemical Name		ppm	mg/m ³	ppm	mg/m ³
Methyl Methacrylate	TWA	100 ppm		100 ppm	
	STEL	[1]	[1]	[1]	[1]
Footnotes:					
1. Not Established					

ENGINEERING CONTROLS: MECHANICAL local exhaust ventilation at point of contaminant release. Use local exhaust ventilation with a minimum capture velocity of 100 ft/min (30 m/min) at point of monomer evolution.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Use chemical splash goggles (AVSI Z-87.1 or approved equivalent).

SKIN: Impervious gloves

RESPIRATORY: None required if good ventilation is maintained. Otherwise, wear self-contained breathing apparatus (pressure demand, MSHA/NIOSH approved or equivalent)

PROTECTIVE CLOTHING: Impervious clothing and boots.

OTHER USE PRECAUTIONS: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

COMMENTS: RECOMMENDED WORK PLACE EXPOSURE LIMITS

TWA - STEL + 75ppm methyl Methacrylate; 4 mg/m³HQ

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: Acrid fruity odor

APPEARANCE: liquid

COLOR: Various colors

VAPOR PRESSURE: 29 @ 68F

MATERIAL SAFETY DATA SHEET

Date Issued: 12/18/2008
 MSDS No: LS1001
 Date Revised: 12/18/2008
 Revision No: 1

TruAcrylic™ Monomer Orthodontic Acrylic Liquids

VAPOR DENSITY: 3.5 (Air=1)
BOILING POINT: 214F
FREEZING POINT: -54F
SOLUBILITY IN WATER: Moderate 1.5%
EVAPORATION RATE: Greater than >1
SPECIFIC GRAVITY: (H2O = 1) 0.94
VISCOSITY: 0.53 cps

10. STABILITY AND REACTIVITY

STABILITY: Stable.
POLYMERIZATION: May occur
CONDITIONS TO AVOID: Heat, Aging, Contamination, Oxygen-Free atmosphere and sunlight.
HAZARDOUS DECOMPOSITION PRODUCTS: NA = Not Applicable
INCOMPATIBLE MATERIALS: Other oxidizing or reducing agents, acids and bases, UV light, contamination

11. TOXICOLOGICAL INFORMATION

ACUTE

Chemical Name	ORAL LD ₅₀ (rat)	DERMAL LD ₅₀ (rabbit)	INHALATION LC ₅₀ (rat)
Methyl Methacrylate	5000 mg/kg (Rat)	5000 mg/kg (Rabbit)	29.8 mg/l (Rat)

DERMAL LD₅₀: 35 500 mg/kg (rabbit)

ORAL LD₅₀: 7900 mg/kg (rat)

INHALATION LC₅₀: > 12500 to 16,500 ppm for 0.5 hours

NOTES: Human Patch Test. About 1/3 of 50 subjects developed a mild erythema at the site of application. 20% of subjects showed evidence of sensitivity when tested 10 test later.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Not Available

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Incinerate liquid and the contaminated diking material, in accordance with state and federal regulations.

MATERIAL SAFETY DATA SHEET

Date Issued: 12/18/2008

MSDS No: LS1001

Date Revised: 12/18/2008

Revision No: 1

TruAcrylic™ Monomer Orthodontic Acrylic Liquids

RCRA/EPA WASTE INFORMATION: When discarded, this material is a hazardous waste.

RCRA HAZARD CLASS: RCRA #D-001 (ignitable); reportable quantity 1000 lbs. (40 CFR Part 302) "Superfund".

14. TRANSPORT INFORMATION

COMMENTS: None Reported

15. REGULATORY INFORMATION

COMMENTS Not Available

16. OTHER INFORMATION

REASON FOR ISSUE: New MSDS Format

APPROVED BY: J. Hutchins **TITLE:** QA/RA Director

PREPARED BY: T. Swan

INFORMATION CONTACT: 1-800-999-3161

REVISION SUMMARY: Revision #: 1. This MSDS replaces the December 18, 2008 MSDS.

GENERAL STATEMENTS: Footnote to Section 3 : NR= Not Required

MANUFACTURER DISCLAIMER: The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. Ortho Technology assumes no responsibility for personal injury or property damage to vendees, users or third parties caused by this material. Such vendees or users assume all risks associated with the use of the material.