Section 1: IDENTIFICATION

Product details:

Trade name: Tray Monomer
Chemical name: Methyl Methacrylate
Application of the substance / the preparation: Manufacture of dental prosthesis
Uses Advised Against: Non-dental use

Manufacturer/Supplier:

Fricke Dental International, Inc.
165 Roma Jean Parkway
Streamwood, IL 60107 U.S.A.
Telephone: (630) 540-1900

Emergency Information:

(800)535-5053 (Infotrac)

Section 2: HAZARDS IDENTIFICATION

Hazard classification:

Highly Flammable Liquid (Category 2)
Acute toxicity, Oral, Category 4 (OSHA), Category 5 (UN Purple Book GHS)
Acute toxicity, Dermal, Category 4 (OSHA), Category 5 (UN Purple Book GHS)
Acute toxicity, Inhalation, Category 4 (OSHA), Category 5 (UN Purple Book GHS)
Eye irritation (Category 2B)

Labeling Pictogram/Symbol:

Signal word:

Danger

Hazard statement(s)

H225	Highly flammable liquid and vapor.
H303	May be harmful if swallowed.
H315	May cause skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye damage.
H335	May cause respiratory irritation.

Precautionary statement(s)

P202	Do not handle until all safety precautions have been read and understood.
P234	Keep only in original container.
P235+P410	Keep cool. Protect from sunlight.

Section 2: HAZARDS IDENTIFICATION (Continued…)	
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330	IF SWALLOWED: Rinse mouth.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	If exposed or concerned: Get medical advice attention.
P312	Call a poison center or doctor if you feel unwell.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.

Section 3: COMPOSITITION/INFORMATION ON INGREDIENTS

Chemical Characterization:
Description:

CAS #	Name	Hazard Classification	%
80-62-6	Methyl Methacrylate (MMA)	H225 Highly flammable liquid and vapor. H303 May be harmful if swallowed. H315 May cause skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye damage. H335 May cause respiratory irritation.	>95%
99-97-8	Dimethyl p Toluidine	H301 Toxic if swallowed. H311 Toxic in contact with skin. H331 Toxic if inhaled. H402 Harmful to aquatic life. H413 May cause long-lasting harmful effects to aquatic life.	< 2%
123-31-9	Hydroquinone	H302 Acute Toxicity (oral) H318 Eye irritant – Serious eye damage, category 2 H317 Skin sensitization – category 1 H400 Hazardous to aquatic environment, acute, category 1	< .001%

Section 4: FIRST-AID MEASURES

Inhalation: Remove to fresh air. Get medical attention if discomfort persists.
Skin: Immediately wash with water and soap. Rinse thoroughly. If irritation occurs, consult a doctor.
Eye: Flush with plenty of water for at least 15 minutes. Seek medical advice.

Section 4: FIRST-AID MEASURES (Continued…)

Ingestion: If swallowed, DO NOT induce vomiting, immediately give two glasses of water, or activated charcoal slurry. Seek immediate medical advice. Never give anything by mouth to an unconscious person.

Section 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:

CO_2, extinguishing powder, dry chemical, water fog (by trained personnel) in flooding amounts.

Approx. flammable limit by % volume in air:

LEL: 2.1 % UEL: 12.5%

Advice for Firefighters:

Wear respirator-MSHA/NIOSH approved or equivalent, self-contained breathing apparatus.
Use cold water spray to cool containers. Heat can cause containers to rupture explosively due to polymerization.
Vapors are heavier than air and may travel to the ignition source.

Section 6: ACCIDENTAL RELEASE MEASURES

Small spill

Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.

Large spill

Evacuate area and remove sources of ignition. Prevent skin contact and breathing vapor. Confine and remove with inert absorbent. Ventilate area. Prevent entry into sewers, basements or confined areas.

Additional information

See section 13 for disposal information.
See section 8 for information on personal protection equipment.

Section 7: HANDLING AND STORAGE

Handling

Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do no ingest. Do not breathe gas/fumes/vapor/spray. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as metals, acids, alkalis.

Storage

Keep in a well ventilated area. Store under 80°F (27°C). Keep container tightly closed and sealed until ready for use. Ground all equipment containing material. Avoid all possible sources of ignition (spark or flame).

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Provide good local exhaust at processing equipment controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Eye/Face Protection: Safety goggles or chemical splash goggles.

Skin Protection: Wear impervious gloves with consideration to the product and the preparation.

Body Protection: Protective work clothing.

Respiratory Protection: Vapor respirator. Be sure to use an approved/certified respirator or equivalent.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (Continued…)	
Components with limit values that require monitoring at the workplace:	
80-62-6 Methyl Methacrylate	
PEL () REL () TLV()	410 mg/m^3, 100ppm 410 mg/m^3, 100ppm Short-term value: 410 mg/m^3, 100ppm Long-term value: 205 mg/m^3, 50ppm
123-31-9 Hydroquinone	
PEL () REL () TLV()	2 mg/m^3 TWA 2 mg/m^3 Ceiling (15 Minutes) 2 mg/m^3 TWA
97-90-5 Dimethyl p Toluidine	
PEL () REL () TLV()	None Established

Additional Information: The lists that were valid during the creation were used as a basis.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

General Information	
Physical state and appearance	Liquid
Color	Not available
Odor	Acrid fruity odor
Change in Condition	
Approx. boiling point	101°C @ 760mm Hg (213.8°F)
Flash Point	55°F (Open cup) (12.78°C)
Approx. auto-ignition temperature	790°F (421°C)
SADT	N/A – does not contain organic peroxides
Other	
Vapor Density	3.5 (Air = 1)
Solubility in water	1.6g / 100g
Percent Volatile	> 95%
Evaporation Rate	3 (Butyl Acetate = 1)
Flammable limits in Air, % by Volume	Lower limit: 2.1 Upper limit: 12.5

Section 10: STABILITY AND REACTIVITY

Stability

Stable. Stable at room temperature in closed containers under normal storage and handling conditions.

Conditions to Avoid

Heat and ignition sources. Contamination.

Incompatibility

Reducing and oxidizing agents. Material has strong solvent properties and can soften paint or rubber.

Hazardous Decomposition

Can yield CO, CO_2, smoke

Hazardous Polymerization

May occur

Conditions to Avoid for Hazardous Polymerization

Excessive heat (temperatures above 40°C), contamination, peroxides, amides, and other oxidizing or reducing agents.

Section 11: TOXICOLOGICAL INFORMATION

Routes of Entry

Eye contact. Inhalation. Ingestion.

Toxicity to Animals

WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE. Acute oral toxicity (LD50): 7872 mg/kg [Rat]. Acute toxicity of the vapor (LC50): 5303.3 ppm 4 hours [Rat].

Chronic Effects on Humans:

The substance is toxic to lungs, mucous membranes.

Other Toxic Effects on Humans:

Hazardous in case of skin contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (permeator).

Special Remarks on Toxicity to Animals:

Not available.

Special Remarks on Chronic Effects on Humans:

Embryotoxic and/or foetotoxic in animal.

Special Remarks on other Toxic Effects on Humans:

Not available.

Section 12: ECOLOGICAL INFORMATION

General Notes

Avoid transfer into the environment.

Section 13: DISPOSAL CONSIDERATIONS

General Notes

Avoid transfer into the environment. Do not allow product to reach sewage system.
Disposal must be completed according to official regulations.

Section 14: TRANSPORT INFORMATION

UN Number: 1247
Proper Shipping Name: Methyl Methacrylate Monomer, Inhibited
Hazard Class: 3
Packing Group: II / **Label Statement:** Flammable liquid

Section 15: REGULATORY INFORMATION

Federal and State Regulations

SARA Title III, Section 302 (TPQ): Hydroquinone - TPQ (lbs):1000
SARA Title III, Section 302 (RQ): Methyl Methacrylate - RQ (lbs): 1000; Hydroquinone - RQ (lbs): 500
SARA Title III, Section 311-312: Methyl Methacrylate, Hydroquinone
SARA Title III, Section 313: Methyl Methacrylate, Hydroquinone
TSCA Section 8(b): This product contains chemicals that are on the TSCA List

Section 15: REGULATORY INFORMATION (Continued…)

Massachusetts RTK: Methyl Methacrylate, Hydroquinone
New Jersey RTK: Methyl Methacrylate, Hydroquinone
Pennsylvania RTK: Methyl Methacrylate, Hydroquinone
NON-hazardous ingredients present at a concentration of 3% or more required to be listed by Pennsylvania: NONE
California RTK: Methyl Methacrylate, Hydroquinone
Substances known to the state of California to cause cancer: NONE
Substances known to the state of California to cause birth defects or other reproductive harm: NONE
Florida RTK: Methyl Methacrylate, Hydroquinone
Minnesota RTK: Methyl Methacrylate, Hydroquinone

WHMIS (Canada)

Class B-2 Flammable liquid
Class D-2B Material causing other toxic effects

EINECS (Europe)

Hazard Symbols
Xi – Irritant
F – Flammable

Risk Phrases
R11 – Highly Flammable
R36/37/38 – Irritating to eyes, respiratory system and skin
R43 – May cause sensitization by skin contact

Safety Phrases
S2 – Keep out of the reach of children
S24 – Avoid contact with skin
S37 –Wear suitable gloves
S46 – If swallowed, seek medical advice immediately and show this container or label

HMIS (U.S.A.)

Health Hazard: 2
Fire Hazard: 3
Reactivity: 2
Personal Protection: H

National Fire Protection Association (U.S.A.)

Health: 2
Flammability: 3
Reactivity: 2
Specific Hazard:

Protective Equipment

Gloves, Splash goggles,
Lab Coat
Vapor respirator
Be sure to use an approved/certified respirator or equivalent. Wear an appropriate respirator when ventilation is inadequate.

Section 16: OTHER INFORMATION

References

Not Available

Other Special Considerations

Not Available

Last Update/Revision Date:	01/02/17
Supersedes/Replaces:	SDS.1023.3
Revised by:	R. Tekstar

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