SAFETY DATA SHEET (SDS)
TRAY-F LIQUID

1. IDENTIFICATION

Product Name:	Acrylic Liquid Tray-F for Premium Tray resins
Other Name or Code:	1122100 or 1122200
Use:	Dental custom trays.
Supplier Name:	DenPlus Inc.
Address:	333-M Chemin du Tremblay Boucherville, QC, Canada, J4B 7M1
Phone Number for Information:	450.641.1330
Emergency Phone Number:	613.996.6666
Anti-Poison Center of Quebec	1.800.463.5060

2. HAZARDS IDENTIFICATION

2.1 Classification

Flammable liquid - Category 2	H225	Highly flammable liquid and vapor
Skin corrosion/irritation - Category 2	H315	Causes skin irritation
Skin sensitization – Category 1	H317	May cause an allergic skin reaction
Specific target organ toxicity (STOT) - single exposure - Category 3	H335	May cause respiratory irritation
Category 1B – Carcinogen	H350	May cause cancer
Hazardous to the aquatic environment – Acute hazard Category 3	H402	Harmful to aquatic life

2.2 Label elements

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
H350	May cause cancer
H402	Harmful to aquatic life

Precautionary statements:

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No Smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing vapors.
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P303+P361+P353	IF ON SKIN (or hear) : Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED : Remove person to fresh air and keep comfortable for breathing.
P308+P313	IF exposed or concerned, get medical advice/attention.
P312	Call a Poison Center/doctor if you feel unwell.
P332+P313	If skin irritation occurs : Get medical advice/attention.
P333+P313	If skin irritation or rash occurs. Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash before reuse.
P370+P378	In case of fire, use water spray, foam dry powder or CO_2 for extinction.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container to hazardous waste in accordance with local, state or national legislation. Incinerate under approved controlled conditions, using incinerators suitable for the disposal of flammable organics.

3. INFORMATION ON INGREDIENTS

Hazardous ingredients	CAS	Concentration range
Methyl Methacrylate Monomer Inhibited	80-62-6	80 to 100 %
Isopropanol	67-63-0	1 to 5 %
N,N-Dimethyl-p-toluidine	99-97-8	0.1 to 1 %

4. FIRST-AID MEASURES

4.1 Description of first aid measures

Information	Methyl methacrylate is absorbed into the body by inhalation, swallowing and through the skin.
Inhalation	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell.
Skin Contact	IF ON SKIN (or hair): Wash with plenty of water. If skin irritation or rash occurs, get medical attention. Take off contaminated clothing.
Eye Contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain immediate medical attention.
Ingestion	IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Obtain immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Isopropanol cause serious eye irritation. Low toxicity. May cause corneal injury. May cause lachrymation (excessive tears). May cause pain disproportionate to the level of irritation to eye tissue. Aspiration into the lungs during ingestion or vomiting may lead to chemical pneumonitis. May cause central nervous system effects, such as headache, nausea, vomiting, abdominal pain, dizziness, confusion and breathing difficulties. Small amounts swallowed incidental to normal handling operations are not likely to cause injury.

4.3 Indication of any immediate medical attention and special treatment needed

None necessary

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

In case of fire, use water spray, carbon dioxide (CO_2), spray foam, dry powder. Keep containers cool by spraying water if exposed to fire. Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Highly flammable liquid and vapor. May polymerize on heating. Sealed containers may rupture explosively if hot.

5.3 Advice for firefighters

A self-contained breathing apparatus and suitable protective clothing should be worm in fire conditions.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Eliminate sources of ignition. Wear protective gloves and eye/face protection. Avoid breathing vapors. See section 8.

6.2 Environmental precautions
Avoid release to the environment. Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

6.3 Methods and material for containment and cleaning up
Collect spillage. Adsorb spillages onto sand, earth or any suitable adsorbent material. Do not adsorb onto sawdust or other combustible materials. Transfer to a lidded container for disposal or recovery. Use only non-sparking tools.

6.4 Reference to other sections
See sections: 8 and 13

7. HANDLING AND STORAGE

7.1 Precautions for safe handling
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
Do not use compressed air for filling, discharging or handling. Do not eat, drink or smoke at the workplace. Wash thoroughly after handling.
Avoid contact with skin and eyes. Avoid breathing vapours. Use only outdoors or in a well-ventilated area. The vapor is heavier than air; beware of pits and confined spaces. Ground container and receiving equipment. Use explosion proof electrical equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Protect from sunlight.
IMPORTANT: Methacrylates stored in bulk must be kept in contact with air (oxygen). Monomer vapours are uninhibited and may form polymers in vent or flame arresters.
Storage temperature (°C): < 40 °C. Preferably not exceeding 30°C.
Incompatible materials: Polymerization catalysts, such as peroxy or azo compounds, strong acids, alkalis and oxidizing agents. Oxides and salts of transition metals. Organic Nitrogen containing compounds. Cyclohexanone/Cyclohexenol tautomer.

7.3 Specific end use(s)
Manufacture of custom dental trays.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Control parameters:

Substance	LTEL	LTEL	STEL	STEL
Methyl Methacrylate	205 mg/m^3	50 ppm	416 mg/m^3	100 ppm
Isopropanol	985 mg/m^3	400 ppm	1230 mg/m^3	500 ppm

LTEL: Long-term exposure limit
STEL: Short-term exposure limit

8.2 Exposure controls

Appropriate engineering controls
Do not eat, drink or smoke at the workplace. Provide adequate ventilation, including appropriate local extraction, to ensure that the occupational exposure limit is not exceeded. Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required. The following information is given as general guidance.

Eye/face protection	Wear eye/face protection. Safety spectacles/goggles/full face shield.
Skin protection	Wear suitable gloves. For splash protection: Butyl; EN 374. For immersion protection: Butyl; 0.7 mm or greater; EN 374. Suitability of gloves should be confirmed with glove manufacturer. Change gloves, if contamination occurs or duration of activity exceeds breakthrough time. Breakthrough time of the glove material: refer to the information provided by the gloves' producer.
Respiratory protection	Wear suitable respiratory protective equipment if exposure to levels above the occupational exposure limit is likely. A dust mask is not acceptable. A suitable mask with filter type A (EN141 or EN405) may be appropriate. In the event of formation of particularly high levels of vapor a self contained breathing apparatus may be appropriate.

Environmental exposure controls
Ensure proper process control to ensure releases to air are within local permits. Monitor and regularly maintain ventilation equipment to ensure performance. Do not empty into drains. Contain and collect spillages for incineration. Fully polymerize before landfill. Only dispose of polymerized material with household waste.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear liquid
Odor	Characteristic strong and acrid
Odor threshold	0.75 ppm
pH (Value)	Not applicable
Melting point (°C)	-48
Boiling Point (°C)	100.5
Flash Point (°C)	10 [Closed cup]
Flammability (solid, gas)	Highly flammable liquid and vapour
Flammable Limits (Lower) (%v/v)	2.1
Flammable Limits (Upper) (%v/v)	12.5
Flammable Limits	Methyl methacrylate
Vapor pressure (Pascal)	3700 at 20°C

Vapor Density (Air=1)	3.5
Solubility (Water)	Slightly soluble 1.53% at 20°C
Solubility (Other)	Miscible with most organic solvents
Partition Coefficient (n-Octanol/water)	1.38
Auto Ignition Temperature (°C)	435
Self accelerating polymerization temperature (SAPT) (°C)	> 55
Viscosity (mPa. s)	0.53 at 20 °C
Explosive properties	Not applicable
Oxidizing properties	Not applicable
Density (g/ml)	0.94 at 20°C

10. STABILITY AND REACTIVITY

10.1 Reactivity
Will exothermically polymerize in the presence of initiators.

10.2 Chemical stability
Stable in the presence of inhibitor.

10.3 Possibility of hazardous reactions
Susceptible to polymerization initiated by prolonged storage or the presence of catalyst.

10.4 Conditions to avoid
Heat and direct sunlight.

10.5 Incompatible materials
Polymerization catalysts, such as peroxy or azo compounds, strong acids, alkalis and oxidizing agents. Oxides and salts of transition metals. Organic Nitrogen containing compounds. Cyclohexanone/Cyclohexenol tautomer.

10.6 Hazardous decomposition products
Does not decompose up to auto-ignition temperature.

11. TOXICOLOGICAL INFORMATION
The following information is based on the principal component: methyl methacrylate.

Acute toxicity	
Ingestion	Low oral toxicity, but ingestion may cause irritation of the gastrointestinal tract.
Inhalation	May cause drowsiness and dizziness.
Skin corrosion/irritation	Causes skin irritation. Repeated and/or prolonged contact may cause dermatitis.
Serious eye damage/irritation	High vapor concentration will cause irritation.
Skin sensitization data	Methyl methacrylate: May cause an allergic skin reaction.
Respiratory sensitization data	Not a respiratory sensitizer. Irritant to the respiratory system and high concentrations may aggravate pre-existing conditions.

Aspiration data	Based upon the available data, the classification criteria are not met.
STOT - single exposure	May cause respiratory irritation. Exposure to high concentrations may produce adverse effects on the nasal epithelium.
STOT - repeated exposure	None.
Germ cell mutagenicity	Based upon the available data, the classification criteria are not met.
Reproductive toxicity	Based upon the available data, the classification criteria are not met.
Carcinogenicity	This product contains: N,N-Dimethyl-p-toluidine : May cause cancer.

12. ECOLOGICAL INFORMATION

The following information is based on the principal component: methyl methacrylate.

12.1 Toxicity

Harmful to aquatic life.

12.2 Persistence and degradability

Readily biodegradable.

12.3 Bioaccumulative potential

The product has low potential for bioaccumulation.

12.4 Mobility in soil

The product is predicted to have high mobility in soil.

12.5 Results of PBT and vPvB assessment

Not classified as PBT or vPvB.

12.6 Other adverse effects

None known.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Dispose of contents/container to hazardous waste in accordance with local, state or national legislation. Incinerate under approved controlled conditions, using incinerators suitable for the disposal of flammable organics. The packaging should be disposed of with due care, ensuring that the package is completely emptied. In some cases the packaging itself may be regarded as a waste requiring special treatment. If in any doubt please seek specialist advice from a competent authority.

14. TRANSPORTATION CONSIDERATIONS

14.1 UN number
1993

14.2 UN Proper Shipping Name
METHYL METHACRYLATE MONOMER, STABILIZED, MIXTURE

14.3 Transport hazard class(es)

Class	3
IMDG Class	3
IMDG EMS	F-E, S-D
IATA	3
ADR Classification Code	F1
ADR HIN	33
ADR Transport Category	2
Tunnel Restriction Code	D/E
RID	3
ADN	3

14.4 Packing group
II

14.5 Environmental hazards

Environmentally hazardous substance	No.
Marine Pollutant	Not classified as a Marine Pollutant.

14.6 Special precautions for user
No special requirements.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code
Not applicable.

15. REGULATORY INFORMATION

WHMIS 2015
Canadian Hazardous Products Regulations (SORS2015-17)
Canadian Hazardous Products Act (R.S.C., 1985, c. H-3)
Hazardous Products Information Regulation (Quebec S-2.1, r. 8.1)

16. OTHER INFORMATION

Sections containing revisions or new statements : 2, 7, 9, 11, 12, 14

Date of revision : July 9, 2021

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