



Material Safety Data Sheet
Therm Tray 1

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

THERM TRAY 1

MANUFACTURED FOR:

Advantage Dental Products, Inc.
4498 Klais Dr.
Clarkston, MI 48348

FOR INFORMATION CALL:
(800) 388-6319 or (248) 391-1625

EMERGENCY TELEPHONE:

ChemTel, Inc. (United States/ Canada) 1-800-255-3924
(International) 813-248-0585 (consult operator for dialing United States from overseas)



Description:	ε-Caprolactone, homopolymer	Color: White
Physical Form:	Granules/Pellets in plastic tray	Odor: Odorless
NFPA Profile:	Health 0	
	Flammability 0	
	Instability/Reactivity 0	

Note: NFPA = National Fire Protection Association

2. CHEMICAL COMPONENTS

For Matrix Material

2-Oxepanone, homopolymer CAS Number: 24980-41-4 **Concentration: >99%**

For Tray Material

Polypropylene polymer CAS Number: 9003-07-0 **Concentration: >50%**

Talc CAS Number: 14807-96-06 **Concentration: 5-50%**

Carbon CAS Number: 1333-86-4 **Concentration: 0-5%**

This is not a hazardous product as defined in the OSHA Hazard Communication Standard - Substance non-classified according to EU/EEC Directive 67/548/EEC.

3. EFFECTS OF OVEREXPOSURE

Acute Effects

Eye: Direct contact may cause temporary discomfort.

Skin: Burns from exposure to molten polymer; no expected irritation from exposure to material at room temperature.

Inhalation: Temporary irritation may occur.

Oral: biologically inert; low toxicity.

Prolonged/Repeated Exposure Effects

Skin: See above.

Inhalation: See above

Oral: See above

Signs and Symptoms of Overexposure: See Acute Effects Sections.

Medical Conditions Aggravated by Exposure: respiratory conditions – by inhalation only.

The above listed potential effects of overexposure are based on actual data, results of studies performed upon similar compositions, component data and/or expert review of the product. Please refer to Section 11 for the detailed toxicology information.

Therm Tray 1**4. FIRST AID MEASURES**

Eye: Flush eyes with running water for several minutes, while keeping the eyelids wide open.

Skin: In case of contact with molten polymer: cool rapidly with cold water without attempting to peel it from skin. Obtain medical treatment for burns.

Inhalation: Remove to fresh air; seek medical attention for serious or persistent symptoms.

Oral: No first aid should be needed.

Comments: Treat symptomatically.

5. FIRE FIGHTING MEASURES

Flash Point: 275 °C (COC); Decomposes ~ 200 °C (references homopolymer pellets only)

Autoignition Temperature: Not determined.

Flammability Limits in Air: Not determined.

Extinguishing Media: Choose media to fight surrounding fire, no restriction on media selection.

Fire Fighting Measures: Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan. As for any fire, ventilate and clean the rooms before re-entry.

Unusual Fire Hazards: Combustible. May form dangerous gas/vapors in cases of decomposition (see section 5). Possible build-up of electrical charges, which could cause a fire by electrical discharges is possible.

Hazardous Decomposition Products: Thermal breakdown of this product during fire or very high heat conditions may evolve the following hazardous decomposition products: Carbon oxides and traces of incompletely burned carbon compounds, caprolactone monomer, soot/smoke.

6. ACCIDENTAL RELEASE MEASURES

Containment/Clean up: Spilled material can be a slipping hazard. Observe all personal protection equipment recommendations described in Sections 5 and 8. Collect the product with suitable means avoiding dust formation. Place material into a closed and labeled container. Prevent discharges into the environment (sewers, rivers, soils, etc.). For disposal methods, refer to section 13. Sections 13 and 15 of this MSDS provide information regarding certain federal and state requirements. Note: See section 8 for Personal Protective Equipment for Spills.

7. HANDLING AND STORAGE

Use electrically conductive materials for piping circuits and equipment. Avoid heating the product above the decomposition temperature (see section 9). Keep in original packaging, closed, in a dry area. Keep away from ignition and heat sources. Ground all equipment. No open flames or sparks – no smoking. Prevent electrostatic discharges. Avoid dust and formation of dust clouds. Follow the protective measures given in section 8. Clean up any spilled pellets as quickly as possible.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**Component Exposure Limits**

There are no components with workplace exposure limits.

Engineering Controls

Local Ventilation: None should be needed.

General Ventilation: Recommended.

Personal Protective Equipment for Routine Handling

Eyes: Use proper protection - safety glasses as a minimum.

Skin: Avoid contact with molten material – long sleeves may be needed.

Suitable Gloves: Thermal protective gloves.

Inhalation: Needed if dust clouds form.

Suitable Respirator: Needed for dust clouds – Dust mask type P1.

Personal Protective Equipment for Spills

Eyes: Use proper protection - safety glasses as a minimum.

Skin: Avoid contact with molten material – long sleeves may be needed.

Inhalation/Suitable Respirator: Needed for dust clouds – Dust mask type P1.

Precautionary Measures: Avoid eye and skin contact with molten product. Use reasonable care.

Note: These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.

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Physical Form: Granules/Pellets in plastic tray

Odor: None

Specific Gravity @ 60°C: 1.1

Viscosity: 1,500,000 mPaS @ 100°C

Freezing/Melting Point: ~ 35 °C / 58 - 60 °C (for pellets)

Boiling Point/Range: Not Applicable

Vapor Pressure @ 25°C: Negligible at room temp.

Volatile Content: Not determined.

Solubility (Water): Insoluble (pellets and tray).

Solubility (Solvents): soluble in aromatic solvents (toluene, benzene), chlorinated hydrocarbons (Methylene chloride, Chloroform, etc.) (pellets). Tray will be attacked by acetone, toluene, benzene, and NMP.

Note: The above information is not intended for use in preparing product specifications.

Color: White

Reactivity in Water: None

Oxidizing Properties: None

Explosive Properties: Dust explosion possible

Decomposes: Yes, ~200 °C – tray will deform at lower temperatures.

pH: Not Applicable.

Vapor Density: Not determined.

10. STABILITY AND REACTIVITY

Chemical Stability: Normally Stable; Potential instability at elevated temperatures (See sections 5 & 9).

Hazardous Polymerization: None

Conditions to Avoid: Elevated temperatures to cause decomposition, formation of dust clouds.

Materials to Avoid: Acids, Alkalis

11. TOXICOLOGICAL INFORMATION

Special Hazard Information on Components: Biologically Inert.

Potential Acute Health Effects: See Section 3.

Potential Chronic Health Effects: None

Signs and Symptoms of Exposure: Transient respiratory and eye irritation.

Medical Conditions Generally Aggravated by Exposure: Respiratory conditions through inhalation of dust only.

Carcinogenic or Potential Carcinogenic Effects: Carbon (as carbon black) - listed as a carcinogen. Listing is not applicable to product, as carbon in product is neither respirable or inhalable.

Other Potential Health Effects: None known.

12. ECOLOGICAL INFORMATION

Environmental Effects: No ecological damage or impact anticipated upon exposure of any component to environment in quantities as packaged.

13. DISPOSAL CONSIDERATIONS

RCRA Hazard Class (40 CFR 261) - None

When a decision is made to discard this material, as received, is it classified as a hazardous waste? No

Waste Disposal: Recycling is the preferred route of disposal; alternatively, send product to either an industrial waste incinerator or industrial landfill. Dispose of in accordance with all federal, state, and local regulations.

14. TRANSPORT INFORMATION

DOT Road Shipment Information (49 CFR 172.101)

Not subject to DOT.

Ocean Shipment (IMDG)

Not subject to IMDG code.

Air Shipment (IATA)

Not subject to IATA regulations.



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15. REGULATORY INFORMATION

Contents of this MSDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA Status: All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

EPA SARA Title III Chemical Listings

Section 302 Extremely Hazardous Substances:

None.

Section 304 CERCLA Hazardous Substances:

None.

Section 312 Hazard Class:

Acute: No

Fire: No

Reactive: No

Chronic: No

Pressure: No

Section 313 Toxic Chemicals:

None present or none present in regulated quantities.

Supplemental State Compliance Information

California

Warning: This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproductive harm. **Carbon as Carbon Black is listed as a carcinogen – This warning is not applicable for this product as the carbon content is not respirable nor inhalable, but is part of a solid polymer.**

Massachusetts

Carbon (1333-86-4).

Minnesota

Carbon (1333-86-4).

New Jersey

Carbon (1333-86-4).

Pennsylvania

Carbon (1333-86-4).

16. OTHER INFORMATION

Prepared by: ChemTel Inc.
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Tampa, FL 33602



Tel 888-255-3924 (USA/Canada) or 813-248-0573 (International)

Some of the information presented and conclusions drawn herein are from sources other than direct test data on the product itself. The information in this MSDS was obtained from sources that we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or method of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. If the product is used as a component in another product or used in a way other than recommended by the Company, this MSDS information may not be applicable.