

Product SDS

Reference date: Revision date: 7/25/14

01. Identification of the substance/mixture and of the company

Product name: Instru-Trays

Code number(s): 41013H, 41116H, 41317H

Purpose of product: Use as Floor Trays, Mayo Trays, Custom Trays, Procedure Trays, or Surgical Trays.

Manufacturer/supplier: Healthmark Industries Co.

Address: 18600 Malyn Blvd. / Fraser, MI 48026

Telephone/Fax/Email: (800) 521-6224 / (586) 491-2113 / healthmark@hmark.com

Emergency telephone number: (800) 424-9300 (24-hour service)

02. Hazards identifications

<u>Classification of the substance or mixture</u>: Marlex ® Polypropylene polymers and copolymers plus additives Control as Particulate Not Otherwise Classified (PNOC) or Regulated:

	OSHA PEL	ACGIH TLV
Respirable fraction	5 mg/m^3	3 mg/m ³
Total dust	15mg/m^3	10 mg/m ³

Based on the information presently available, this product does not meet any of the hazard definitions of 29 CFR Section 1910.1200.

Adverse environmental and human health effects:

Acute effect of overexposure:

Eye: Dust may cause mechanical irritation. Processing off gas vapors may cause irritation. Skin: Essentially non-irritating.

Inhalation: Dust may produce mechanical irritation to the mucous membranes of the nose, throat, and upper respiratory tract. Processing off gas vapors may cause irritation to the mucous membranes of the upper respiratory tract.

Ingestion: Essentially non-toxic and inert.

Subchronic and chronic effects of overexposure:

Subchronic animal feeding studies have demonstrated no adverse effects with diet containing 5% or less polymer.

Other health effects:

Long term exposure to high dust concentrations may cause non-debilitating lung changes. Thermal decomposition studies on polypropylene indicate that aldehydes (formaldehyde, acrolein, acetaldehyde, propionaldehyde, butyraldehyde, benzaldehyde); ketones (acetone, methyl ethyl ketone), and organic acids (formic acid, acetic acid) may be released during processing. These substances may be irritation to the mucous membranes of the eyes, nose, mouth, throat, and lungs. Irritant effects should be transitory and can be eliminated with adequate ventilation.

Formaldehyde, which may be produced during thermal processing, is covered by the Formaldehyde Standard, 29 CFR 1910.1048.

Exposure to carbon monoxide, a combustion product of polypropylene, can result in carboxyhemoglobinemia. Carboxyhemoglobinemia is frequently misdiagnosed as the flu.

Chronic exposure to carbon monoxide causes fatigue, poor memory, loss of sensation in fingers, visual disturbances, and insomnia.

Subpopulations sensitive to the inhalation of carbon monoxide exist. Carbon monoxide displaces oxygen in the bloodstream and therefore, can adversely affect people with pre-existing heart disease, pregnant women, and smokers.

Molten polymer may cause severe thermal burns. The interior of molten masses may remain hot for some time because of low thermal conductivity of the polymer. Use care when disposing of or handling such masses.

03. Composition/information on ingredients

Description of the mixture:

Ingredients	CAS #	% by weight	OSHA PEL	ACGIH TLV
Polypropylene <i>or</i>	9003-07-0	50-99	NE	NE
Propylene ethylene copolymer	9010-79-1	50-99	NE	NE
May also contain:				
Polyethylene	9002-88-4	0-49	NE	NE
Ethylene butane copolymer	25087-34-7	0-49	NE	NE
Ethylene-hexene-1 copolymer	25213-02-9	0-49	NE	NE
Ethylene-octene-1 copolymer	26221-73-8	0-49	NE	NE
Additives	Various	0-4	NE	NE

<u>Hazardous ingredients</u>: This product does not meet the definition of a hazardous material as given in 29 CFR Part 1910.1200 (OSHA).

04. First aid measures

<u>General information</u>: For thermal burns, cool quickly with water and seem immediate medical attention. Do not peel off solidified material.

<u>Following inhalation</u>: Remove from exposure. If breathing is difficult or irritation developed, seek medical attention.

<u>Following skin contact</u>: Wash skin with soap and water for at least fifteen minutes. If irritation or adverse symptoms develop, seek medical attention.

<u>Following eye contact</u>: Flush eyes with running water for at least fifteen minutes. If irritation or adverse symptoms develop, seem medical attention.

<u>Following ingestion</u>: Give two glasses of water and induce vomiting only if subject is conscious. Seek medical attention.

Noted for the doctor: N/A

05. Firefighting measures

Suitable extinguishing media: Dry chemical, foam, or carbon dioxide (CO₂)

Unsuitable extinguishing media: N/A

<u>Special hazards arising from the substance and combustion products</u>: Carbon oxides and various hydrocarbons may be released when burned.

<u>Advice for firefighters</u>: Evacuate area of all unnecessary personnel. Wear appropriate safety equipment for fire conditions including NIOSH/MSHA self-contained breathing apparatus (SCBA) and other protective equipment and/or garments described in Section 08 if exposure conditions warrant. Use water fog or spray to cool exposed equipment and containers.

06. Accidental release measures

<u>General information</u>: Precautions required if material is released or spilled: Wear protective equipment and/or garments described in Section 08 if exposure conditions warrant. If concentration of product dust in air is high, eliminate all possible ignition sources. Control dusts by wetting down with water spray. Spilled pellets may create slipping hazard. Sweep or vacuum up sill and place in drums for recovery of disposal.

Environmental precautions: Keep out of water sources and sewers.

<u>Additional information</u>: Waste disposal: Recover for reuse, recycle, incinerate for energy or place in a waste management facility.

07. Handling and storage

<u>Precautions for safe handing</u>: Wear protective equipment and/or garments described in Section 08 if exposure conditions warrant. Avoid breathing vapors, mists, fumes, or dust. Wash thoroughly after handling. Launder contaminated clothing before reuse. Store in a closed container. Store in a well-ventilated area. Moving pellets may generate static electric charge. Bond and ground during transfer. Process only with adequate ventilation. Avoid breathing vapors from thermal processing off gases. Avoid eye or skin contact with thermal processing off gases. Thermal decomposition processing off gas condensate may form on surrounding equipment.

Fire Preventions: N/A

Technical measures and storage conditions: N/A

08. Exposure controls/personal protection

<u>Control parameters</u>: Use adequate ventilation to control concentration below recommended exposure limits. During molding and extruding processes, local exhaust may be needed to control off gases. Personal protection information is based upon general information as to normal uses and conditions. Where special or unusual uses or conditions exist, it is suggested that the expert assistance of an industrial hygienist or other qualified professional be sought.

<u>Personal protective equipment</u>: No special garments required. When cleaning thermal decomposition off gas condensate from equipment, use full-body, long-sleeved garments to prevent skin contact.

Hand protection: Use heat resistant gloves when handling hot or molten material.

<u>Respiratory protection</u>: Not generally required unless needed to prevent respiratory irritation from dust or off gases. If necessary, during molding and extruding processes, use NIOSH/MSHA approved air purifying respirator equipped with an organic vapor cartridge and face mask. If concentration of dust are high, use NIOSH/MSHA approved single-use dust respirator.

Eye protection: Not generally required. Use of chemical goggles if needed to prevent irritation from dust or off gases.

Advice on general occupational hygiene: N/A

Environmental exposure controls: N/A

09. Physical and chemical properties

Appearance: Waxy pellets

Physical state: Solid

Color: Opaque, translucent

Odor: Mild

Safety relevant basic data: N/A

Explosion hazard: N/A

Density: N/A

<u>pH</u>: N/A

Initial boiling point/range: °C /°F N/A

Solubility: Insoluble

Flash point: 343°C / 650°F

Ignition temperature: °C /°F N/A

Melting point: °C /°F N/A

Conditions to avoid: N/A

Incompatible materials: Oxidants

10. Stability and reactivity

Conditions to avoid: N/A

Incompatible materials: Oxidants

Hazardous decomposition products: N/A

11. Toxicological information

Information on toxicological effects: N/A

Irritation: N/A

Sensitization: N/A

Inhalation: N/A

Practical experiences: N/A

Ingredient: N/A

12. Ecological information

Terrestrial toxicity: N/A

Aquatic toxicity: N/A

Mobility: NA/

Persistence and degradability: N/A

Bio accumulative potential: N/A

Results of PBT and vPvB assessment: N/A

Other adverse effects: N/A

13. Disposal considerations

Product: Please refer to applicable local, state, and federal regulations.

Contaminated packaging: N/A

Uncontaminated packaging: N/A

14. Transport information

UN-No: N/A

Proper shipping name: N/A

Classification code: N/A

Packing group: N/A

Hazard label: N/A

15. Regulatory information

Material safety evaluation:

SARA 313: As of the preparation date, this product did not contain a chemical or chemicals subject to the reporting requirement of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

NFPA 704 Hazard Codes: Health – 0 Flammability – 1 Reactivity – 0 0=Least, 1=Slight, 2=Moderate, 3=High, 4=Extreme

Regulation on combustible liquids: N/A

Class according 2009/104/EG (BetrSichV): N/A

Water hazard class: N/A

Storage according TRGS 510 (Storage of hazardous substances in non-stationary containers): N/A

16. Other information

Recommended application: N/A

Relevant R-, H-, and EUH-phrases: N/A

The information supplied in this Safety Data Sheet is designed only as a guidance for the safe use, storage, and handling of the product. This information is correct to the best of our knowledge and beliefs at the date of the publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other processes.