

DYPLAST PRODUCTS

DyTherm™ Phenolic Rigid Foam Insulation

MATERIAL SAFETY DATA SHEET

DYPLAST PRODUCTS, LLC 12501 NW 38TH AVENUE MIAMI, FLORIDA 33054

IMPORTANT: Read this MSDS before handling and disposing of this product and pass this information on to employees, customers, and users of this product. This product is covered by the OSHA Hazard Communication Rule and this document has been prepared in accordance with the MSDS requirements of the rule.

1. Identification of the substance/preparation and the company/undertaking

Product name: DyTherm Phenolic Rigid Foam Insulation

Trade names: DyTherm Phenolic

2. Composition/information on the components Composition: Resol resin polymer
Appearance: Cellular foam Hazardous ingredients/components: concentration, CAS-number, TLV and Hazards Sulfuric Acid: < 7,5 % CAS[7664-93-9] 1 mg/m³ R35
Phosphoric Acid: < 7.5 % CAS[109-66-0] 1 mg/m³ R34 Phenol: < 5.0 % CAS[108-95-2] 8 mg/m³ R23/24/25-3448/20/21/22-68 Pentane and its isomers: < 4,5 % CAS[109-66-0] 1800mg/m³ R12-51/53-65-66-67 Formaldehyde: < 0,4 % CAS[50-00-0] 1,5 mg/m³ R23/24/25-34-40-43

3. Hazards identification Hazards to the healthy of man: The dust irritates lungs, skin and eyes. Harmful when swallowed. Hazards to safety: The dust is combustible. Hazards to the environment: Limited ecotoxicity. Reacts corrosive on cutting equipment.

4. First aid measures After inhalation: Ensure supply of fresh air. Seek medical attention if you feel unwell. After skin contact: In case of contact with skin wash off with soap and water. After eye contact: Flush with water during for at least 15 minutes. If irritation persists, seek medical attention. After ingestion: Drink plenty of water, do not induce vomiting. Seek medical attention.

5. Fire-fighting measures Fire hazard: Suitable extinguishing media: Protective equipment for firefighters: The product is self-extinguishing but produces combustible gas when heated. In a fire, typical decomposition products like carbon black, carbon dioxide and carbon monoxide are formed. Water, foam, carbon dioxide, dry chemical.

During fire fighting self contained breathing apparatus is necessary.

6. Accidental release measures Personal precautions: Environmental precautions:
Methods for cleaning up/taking up: When processing the material in the
absence of L.E.V. a gasmask specific for formaldehyde or a general ABEK-filter, with P2
dustfilter, is recommended. Avoid the spreading of the dust in the environment. Get
waste removed by a recognized waste collector. Clean up with water.

7. Handling and storage Handling: Storage: Storage temperature: No special
measures necessary if used correctly. It is recommended to provide a local extraction
and to monitor the concentrations of the hazardous components on a regular basis when
processing the product. Store in a well-ventilated area, avoid heat sources. Store at a
temperatures between -200 and + 120 °C.

8. Exposure controls/personal protection Technical precautions: Hygiene
measures: Respiratory protection: Hand protection: Eye protection: Skin and body
protection: During milling or sawing, provide dust extraction. Wash hands with soap and
water before breaks and after work. Wear a gas- and dustmask when processing. Wear
gloves while handling foam. Wear goggles. Cover the skin with protective clothing.

9. Physical and chemical properties Appearance: Solid/closed cellular foam Color:
Gray Odor: Phenol / Formaldehyde odor Electric conductivity: Not conductive Density:
37-120 kg/m³ UEL dust: 30 g/m³ Pmax: 9,3 bar Kst: 73 bar m/s Glow temperature:
280°C Auto-ignition temperature: 460°C Water solubility: Insoluble Reacts acid in
contact with water

10. Stability and reactivity Stability: Chemically and physically inert. Conditions to
avoid: Temperatures > 260°C. Materials to avoid: None. Hazardous reactions: None.
Hazardous decomposition products: All decomposition products which can be expected
at a normal fire.

11. Toxicological information Acute oral toxicity: Harmful when swallowed. Irritation -
Eyes: Dust particles can cause mechanical irritation. Irritation - Skin: Chronic exposure
can cause allergy. Irritation of the respiratory organs: Avoid exposure to concentrations >
5 mg/m³ breathable dust and the TLV of the hazardous components. The dust and
vapors from the processing can cause irreversible effects.

12. Ecological information Persistence/degradability: Chemically inert / not
biodegradable.

13. Disposal considerations Waste disposal: Remove waste by a recognized waste
collector. Local legislation has to be considered.

14. Transport information UN Number: Not classified.

15. Regulatory information Characteristics according to EU-regulations: EU
Classification: Not subjected by the EEC-labeling. EU Symbols: None. EU R phrases:
None. EU S phrases: None.

16. Other information

Technical contact address: Dyplast Products, LLC 12501 Nw 38th Avenue Miami, Florida 33054

Technical contact phone number: 305-921-0100

The local codes and legislation must be followed. This product has to be preserved, treated and used with normal industrial hygiene and in accordance with every legal determination. The data given here are based on current knowledge and experience. The purpose of this safety data sheet is to describe the products in terms of their safety requirements. The data do not signify any warranty with regard to the properties of the products. This information is based on our present state of knowledge. It should not therefore be construed as guaranteeing specific properties of the products or their suitability for a particular application. Dyplast Products takes no responsibility whatsoever for risks coming from variations in, or unknown effects of the qualities of feedstock (alone or in combination) and for other applications of the product than what's prescribed.

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