

Material Safety Data Sheet

Product name: FORMOCON FM025/090/130/270/350/450/550

Revision number: 3

Version date: 08/03/2005

1. Product and Company Identification:

Product name: FORMOCON

Synonyms: POLYOXYMETHYLENE COPOLYMER, ACETAL COPOLYMER

Company: FORMOSA PLASTICS CORP.

PLASTICS DIVISION, POM PLANT

Emergency contact: 886-5-3772111 EXT 125/127

2. Composition/Information on Ingredients:

Chemical Name: Polyoxymethylene copolymer, POM

Chemical Formula: $(\text{CH}_2\text{O})_n-(\text{CH}_2\text{CH}_2\text{O})_m$

Composition: more than 99 %

CAS number: 24969-26-4

3. Hazards Identification:

Pellets or powder with slight to no order. Combustion and decomposition may produce hazardous fumes. The dust/powder has US Bureau of Mines relative dust explosion hazard rating of severe. Molten material can cause thermal burns on contact with skin or eyes. Spilled flakes may create a slipping hazard. Overheating may result in release of formaldehyde, which may irritate the eyes and respiratory tract.

4. First Aid Measures:

Skin Contact : If hot or molten polymer or hot vapors contact skin, cool rapidly with cold water. If polymer is stuck to skin, do not remove. Seek medical attention. Allow adhered polymer to come off naturally. Removal of adhered polymer may result in more tissue damage than if polymer is allowed coming off over time.

Eye Contact : Flush with plenty of water. Seek medical attention if discomfort persists, and to remove foreign body.

Inhalation : Move affected person to fresh air. Seek medical attention if breathing difficulties occur.

Ingestion : If significant quantity has been swallowed, give two glasses of water to dilute. Seek medical attention.

5. Fire Fighting Measures

Suitable Extinguishing Media : water mist ;carbon dioxide ;foam ;dry powder.

Extinguishing Media Which Must Not Be Used For Safety Reasons: high volume water jet.

Exposure Hazards: Thermal decomposition or burning may release oxides of carbon and other

toxic gases or vapors .Do not release chemically contaminated water into drains, soil or surface waters .Sufficient measures must be taken to retain water used for extinguishing. Dispose of contaminated water and soil according to local regulations.

Special Protective Equipment for Firefighters:

Use full protective clothing for chemicals and self-contained breathing apparatus.

6.Accidental Release Measures:

Personal Precautions: Do not breathe dust Avoid ignition sources. Avoid contact with skin, eye and clothing.

Environmental Precautions: Prevent contamination of soil, drains and ignition sources.

Methods for Cleaning up: Take up mechanically and place in suitable, closable container for disposal, avoiding formation of dust.

7.Handling and Storage:

Handling: Handle and open container with care. Avoid dust formation and ignition sources. Ensure good ventilation and local exhaust. Do not eat, drink or smoke at the workplace.

Storage: Keep away from food and drink. Store in the original container securely closed, keep in cool, dry place.

Further Information: This product can form an explosive dust/air mixture. Do not compound with PVC (polyvinyl chloride). Take precautionary measures against static's discharges, e.g. by using proper earthly techniques.

8.Exposure Controls/Personal Protection:

Respiratory Protection: wear suitable particle filter mask.

Eye Protection: wear suitable goggles or face protection.

Hand Protection: protective gloves.

Skin and Body Protection: wear overalls and closed footwear.

Further Information: Molten material can cause thermal burns on contact with skin or eyes. Formaldehyde vapors prolonged exposure adverse effects on liver, kidneys and thyroid were observed in animals. Avoid prolonged exposure to temperatures above 380°F(193°C).

9.Physical and Chemical Properties:

Appearance : milk white pellet

Melting Point/Range : 160-170°C(320-338°F)

Boiling Point/Range : not applicable

Specific Gravity : 1.40-1.42

Bulk Density : 0.60~0.80

Solubility In Water : <0.001wt%

Specific Heat,BTU/(LB)(°F) : 0.35

Percent Volatiles : not applicable

Evaporation Rate : not applicable

10.Stability and Reactivity

Chemical stability: Stable under ordinary conditions of use and storage.

Thermal decomposition: > 460°F (238°C).

Conditions to avoid: Flame; do not allow mixing of this material with PVC. Do not heat above 460°F (238°C). Avoid prolonged exposure temperatures above 380°F (193°C). Recommended melt temperature 360~390°F (180~200°C).

Incompatibility: Strong acids and oxidizing agents. Do not compound with PVC or other chlorine containing polymers (to avoid acid formation).

Hazardous decomposition Products: Trioxane, Formaldehyde, and formic acid.

11.Toxicological Information:

No specific information available on this product.

12.Ecological Information:

Biodegradability: No data available.

Bioaccumulation: No data available.

Fish Toxicity: Not known.

13.Disposal Considerations:

Recycling is encouraged. Dispose of waste by incineration, sanitary landfill or other method in accordance with all applicable local, state, and federal laws and regulations.

14.Transport Information:

General precautions: Keep dry during transport. Not dangerous cargo.

Special precautions: No special precautions have to be met.

This material is not regulated under US department of Transportation.

15.Regulatory Information:

Labeling according to EEC directive: Not required

16.Other Information:

This product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with any legal regulation .The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. However, FORMOSA PLASTICS CORP. does not assume any liability.

Whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we do not guarantee that these are the only hazards that exist.