

COSMONATE PI

–Technical Data Sheet–

1. Characteristics of Product

COSMONATE PI is a monomeric MID product with a concentration of 2,4' –, 2,2' –Di phenyl methane diisocyanate, which is far higher than that of COSMONATE PH. The product is kept in liquid state at ambient temperature, and has a linear configuration with two functional groups.

2. Product Application



Paints



Coatings



Adhesives

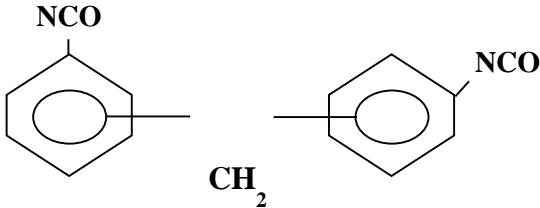


Flooring materials

The concentration of 2,4' –, 2,2' –Di phenyl methane diisocyanate in COSMONATE PI is higher than COSMONATE PH so as to yield a mild reaction and enable easy control of the reaction rate. Consequently, the product is widely used as a raw material in the production of industrial products such as coatings, paints and flooring materials, as well as daily commodities and sports goods.

COSMONATE PI

3. Product standards & general properties

Item	Evaluation Method	Unit	Result
Product Standards			
Purity	ASTM D 1638	wt%	Min. 99.8
Acid content	ASTM D 1638	wt %	Max. 0.015
ortho-MDI	-	area%	Min. 50
General physical properties			
Appearance	-		pale yellow liquid
Boiling point		°C	314
Freezing point		°C	10 ~ 15
Vapor pressure (25°C)		mmHg	0.01
Flash point		°C	196
Molecular weight		g/mol	250
Chemical structure			
			

COSMONATE PI

4. Product Packaging

Cosmonate PI is packed in single 240kg drum.

5. Safety and Health

Contact with the skin can cause inflammation including a rash, while contact with the eyes can cause severe pain, and visual disturbance may result in the event of excessive exposure. Inhalation of the vapor of MDI can cause bronchial asthma, headaches, or breathing difficulties, and its ingestion can cause irritation and inflammation of the gastrointestinal tract. In cases of contact with the skin, rinse the affected area completely with plenty of water or soapy water. In cases of contact with the eyes, rinse immediately with plenty of water or soapy water for 15 minutes, and seek professional medical help. In cases of MDI vapor inhalation, move the affected individual to a place where there is plenty of fresh air, keep him/her in a warm, stable condition, and perform artificial respiration if needed. In cases of ingestion, drink plenty of water, milk or raw eggs and induce vomiting, then seek medical help immediately. In the event of a fire, extinguish with a carbon dioxide fire extinguisher. In the event of a large fire, extinguish with water.

6. Storage and Handling

The optimal storage temperature for COSMONATE PI is 25~35°C. Caution is needed in its storage and handling because the crystal form of monomeric MDI is deposited at temperatures below 10°C. Caution is needed to prevent moisture from being mixed in the storage container, which should be sealed by dry nitrogen gas if possible. When working with MDI, proper safety equipment should be worn, and a ventilation or gas mask should be used if necessary. After work, wash completely with soapy water. Contaminated work clothes should be washed and cleaned for the next use.