

# COSMONATE LI

## –Technical Data Sheet–

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### 1. Characteristics of Product

Cosmonate LI is made by turning part of Cosmonate PH, which is a crystal solid in room temperature, into carbodiimide. In room temperature, it stays as low-temperature liquid and is excellent in transparency especially when applied for special coating sectors. It is a light-yellow modified MDI developed to be handed and used conveniently.

### 2. Product Application



**Steering Wheel**



**Shoe Sole**



**Adhesive**



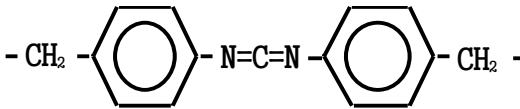
**Electronic substrate coating**

COSMONATE LI is a modified MDI product free from the transparency problem unique to special coating materials, making it appropriate for coating materials. Part of the bonding structure of COSMONATE LI consists of an imide bond, which is stronger than a urethane bond, thus realizing high durability and resistance to hydrolysis, as well as excellent mechanical strength. These properties enable the product to be used in small quantities for improving physical properties. It is possible to use COSMONATE LI for the purpose of improving the stability of final products at low temperature by utilizing its extraordinary effects to improve the compatibility between free NCO groups and polyol when manufacturing prepolymer.

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## 3. Product standards & general properties

Item	Evaluation Method	Unit	Result
<b>Product Standards</b>			
NCO content	ASTM D 1638	wt%	30.0 ~ 31.0
viscosity(25°C)	ASTM D 1638	cps	10 ~ 40
specific gravity(25°C)	ASTM D 1638	-	1.195 ~ 1.25
<b>General Properties</b>			
Appearance			pale yellow liquid
Boiling point		°C	208
Freezing point		°C	10
Vapor pressure (25°C)		mmHg	0.0003
Flash point		°C	210
<b>Chemical Structure</b>			
			

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## 4. Product Packaging

Cosmonate LI is packed in single 250kg 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 proper storage temperature of Cosmonate LI is 20°C–35°C. Take extra precautions to prevent moisture from being mixed into the storage container. Seal the container with dry hydrogen gas if possible. When working with MDI, it is required to wear proper safety gear and, if necessary, a ventilation system needs to be installed or a gas mask should be put on. After work, hands should be washed with soap and water, and the contaminated working garment must be washed before reuse.