

# COSMONATE MC-85W

## –Technical Data Sheet–

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### 1. characteristics of product

COSMONATE MC-85W is a special modified MDI made of soft material popularly used in the production of seat cushion foam and headrests for automobiles and furniture. Kept in liquid state at ambient temperature, this product is easy to store and handle at temperatures down to 10°C. This solvent-free product has viscosity of up to 20 cps at 25°C.

### 2. product application



car Seat



bicycle pad



Head Rest



seat cushion

COSMONATE MC-85W is a special liquid modified MDI developed for the production of seat cushion foam, and is popularly used in the production of cushion pads and headrest pads requiring excellent workability, formability and a high degree of hardness. In particular, the product's hardness has been enhanced to enable its widespread application in the production of seat cushions for automobiles as well as cushions for sofas and chairs, and bicycle pads.

# COSMONATE MC-85W

## 3. Product standards & general properties

item	evaluation	Unit	Result
<b>Product specifications</b>			
NCO content	ASTM D 1638	wt%	34.3 ~ 35.3
viscosity (25°C)	ASTM D 1638	cps	Max. 20
Specific gravity (25°C)	ASTM D 1638	-	1.21 ~ 1.23
<b>General properties</b>			
product exterior			light brown liquid
boiling point		°C	208
freezing point		°C	below 10
vapor pressure(25°C)		mmHg	negilgible
flash point		°C	177 ~ 218
<b>Chemical structure</b>			
<p>Over n=0,1,2,3,4</p> <p>The chemical structure shows a repeating unit of a polyurethane chain. It consists of three benzene rings. The first and third rings are substituted with an isocyanate group (-NCO) at the para position. The second ring is enclosed in square brackets with a subscript 'n', indicating it is a repeating unit. Each benzene ring is connected to the next by a methylene group (-CH<sub>2</sub>-). The overall structure is: OCN-C<sub>6</sub>H<sub>4</sub>-CH<sub>2</sub>-[C<sub>6</sub>H<sub>4</sub>-CH<sub>2</sub>]<sub>n</sub>-C<sub>6</sub>H<sub>4</sub>-NCO.</p>			

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## 4. product packaging

Cosmonate MC-85W is packed in single 230kg drum or in bulk

## 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, allow the affected individual to vomit with their head positioned lower than the hip to prevent suffocation from respiratory tract inhalation, and provide symptomatic treatment. Seek medical help if necessary. 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 MC-85W is 20~30°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.