#### 1. Characteristics of Product

<u>COSMONATE M-200</u> is polymeric MDI, generally used in manufacturing hard and semi-hard polyurethane foam. COSMONATE M-200 is liquefied in normal temperature and easily handled and stored down to -20°C. It is solvent-free form with 2.7 average organic function and maximum of 220 cps (25°C) viscosity which is mixed with monomer MDI of 4,4-diphenyl methane diisocyante and its oligomer above dimer, trimer and tetramer.

## 2. Product Application



#### Constructional Panel

Spray Heat Insulation

Refrigerator

🔺 Car Interior

# 3. Product standards & general properties

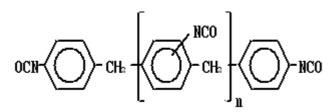
#### Product Standards

ITEM	Evaluation Method	UNIT	RESULT
NCO content	ASTM D 1638	wt%	30.0~32.0
Viscosity (25°C)	ASTM D 1638	cps	150~230
H.C content	ASTM D 1638	%	Max.0.3
Acid content	ASTM D 1638	%	Max.0.1
Specific gravity (25°C)	ASTM D 1638	-	1.23~1.25

#### **General Properties**

ITEM	UNIT	RESULT
Product Exterior		Brown Liquid
Boiling point	°C	200~208
Freezing point	°C	below -20
Evaporation pressure (25°C)	mmHg	ignorable level
Ignition point	°C	177~218
Molecular weight	g/mol	350~400

#### **Chemical Structure**



## 4. Product packaging

COSMONATE M-200 uses 250kg drum package or bulk supply.

# 5. Safety and Hearth

Skin contact might cause rash or inflammation and eye contact might cause severe pain and excessive exposure might cause sight disorder. Also, if you inhaled MDI steam, it would cause bronchial asthma, headache, difficulty to breathing, and etc, and in case of taken, it will cause stimulation and inflammation of digestive organs. If contacted with skin, wash out with much water or soapy water. If contacted with eyes, wash out with much water or soapy

water for about 15 minutes and get medical examination. Also, if you inhaled MDI steam, move to the fresh area, keep warm stabilized, and practice artificial respiration when it's necessary. If swallowed, feed much water or milk, or raw egg and make them throw up, then get medical examination as soon as possible. It has very rare ignition danger, but watch out for fire hazard if digested, carbonic acid gas digestion is suitable. In case of conflagration, put out with water.

## 6. Storage and Handling

<u>COSMONATE M-200's</u> proper keeping temperature is 5~35°C. Be extremely cautious so that water doesn't get mixed in storage instrument and seal the instrument with dry nitrogen gas. In case of working with MDI, wear the proper safety tools. If necessary, install ventilation equipment or wear gas mask. After work, be certain to wash with soapy water and clean the contaminated overalls before you wear it.