



Cosmonate M-200 Introduction -Technical Data Sheet-

Contents

- I . Cosmonate M-200 Applications**
 - II . Cosmonate M-200 Physical properties**
 - III . Cosmonate M-200 Handling and precautions**
-

KUMHO MITSUI CHEMICALS, INC

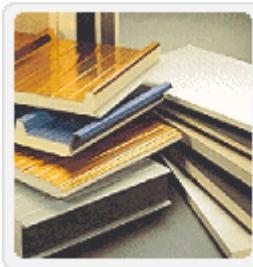
Application Technology Center

Cosmonate M-200 Applications

■ Characteristics of Product

Cosmonate M-200 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 125 cps (25°C) viscosity which is mixed with monomer MDI of 4,4-diphenylmethane diisocyanate and its oligomer above dimer, trimer and tetramer.

■ Product Application



Panels for buildings



Spray heat insulation



Refrigerators



Automobile interior material

Cosmonate M-200 is widely used for panels for buildings, refrigerators, and vehicle interior materials

Cosmonate M-200 Physical properties

■ Product standards & general properties

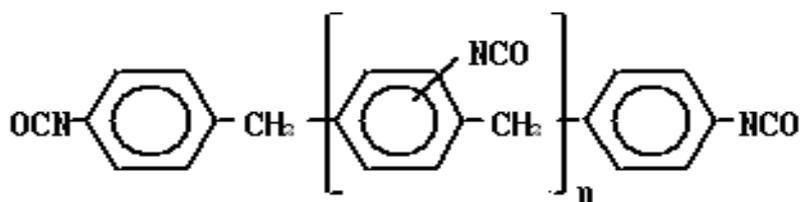
Product Standards

Item	Evaluation method	Unit	Result
NCO content	ASTM D 1638	wt%	30.0~32.0
Viscosity (25°C)	ASTM D 1638	cps	150~250
Specific gravity (25°C)	ASTM D 1638	-	1.23~1.25

General properties

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

■ Chemical Structure



Cosmonate M-200 Handling and precautions

■ Product Packaging

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

■ Safety and Health

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.

■ Storage and Handling

M-200's proper keeping temperature is 20~35°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.