

# **Product Documentation**

**Product Name : COSMONATE SI-100**

**Kumho Mitsui Chemicals Co.,**

# COSMONATE SI-100

## -Technical Data Sheet-

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### 1. characteristics of product

Cosmonate SI-100 is a special MDI, which is widely used for making not only soft slab polyurethane foams for furniture, toys, and sound absorbers, but also various soft foams such as memory foams. It is a product that can realize a high rate of foaming and good air ventilation.

Cosmonate SI-100 is liquid at room temperature and can be stored and handled easily in the temperature of up to 10°C. In its solvent-free form, it provides a viscosity of up to 50 cps (25°C).

### 2. product application



Automobile seat covers



Beddings



Furniture



Sound absorbers

Cosmonate SI-100 is a special MDI, which is widely used in automobile and furniture sectors. As it has excellent rate of foaming and good air ventilation, it is widely used for lamination foams for automobile seat covers, foams for making furniture and beddings, as well as in the soft polyurethane sector including toys and sound absorbers.

# COSMONATE SI-100

## 3. Product standards & general properties

Items	evaluation methods	units	results
<b>Product specifications</b>			
NCO content	ASTM D 1638	wt%	32.8 ~ 33.4
Viscosity (25°C)	ASTM D 1638	cps	Max. 50
Specific gravity (25°C)	ASTM D 1638	-	1.20 ~ 1.22
<b>General Properties</b>			
Product exterior			brown liquid
Freezing point		°C	below 10°C
Vapor pressure(25°C)		mmHg	negilgible
Flash point		°C	177 ~ 218
<b>Chemical structure</b>			
<p>Over n=0,1,2,3,4</p>			

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## 4. product packaging

Cosmonate SI-100 uses 250kg drum package or bulk supply

## 5. 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 vapor, 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 vapor, 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

SI-100 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.