COSMONATE PH -Technical Data Sheet-

1. Characteristics of Product

CosmonatePH is pure monomeric MDI that has purified to high degree of purity. It is crystal white solid on normal temperature, and pure and clear like water when it is liquefied. And it's monomeric MDI of 4,4 -, 2,4 -, 2,2 -diphenylmethane diisocyanate with fan shape structure that the organic function is 2. Especially, it has strong resistance of discoloration which is the property of monomeric MDI. So it has excellent inner discoloration stabilization against high temperature and ultraviolet rays.

2. Product Application



Paint

TPU Elastomer

Shoe Sole

Synthetic Leather

Cosmonate PH is widely used as raw materials to manufacture industrial goods, living goods and sports goods and SPANDEX, shoe sole, TPU elstomer, synthetic leather, paint and adhesive.

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3. Product standards & general properties

ltem Ev	aluation Method	Unit	Resuit
Product Standards			
Degree of Purity NCO Content APHA Color Tone H.C C/H Hydrolyzable chloride Viscosity (25°C) Specific Gravity (25°C)	ASTM D 1638 ASTM D 1638 ASTM D 1638 ASTM D 1638 ASTM D 1638 ASTM D 1638 ASTM D 1638	wt% wt% - wt% cps -	Min. 99.8 33.6 Max. 20 Max. 0.002 Max. 0.2 SOLID 1.20
General Properties			
Product Exterior Boiling Point Freezing Point Evaporation Pressure (25°C) Ignition Point Molecular Weight		– °C mmHg °C g/mol	White Solid 314 38.7 0.01 196 250
Chemical Structure			
$OCN - \langle O \rangle - CH_2 - \langle O \rangle - NCO$			

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4. Product Packaging

Cosmonate PH uses 235kg 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 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

The proper temperature of cosmonate PH is $40 \sim 45$ °C in liquid state and when out of this temperature range, dimer will rapidly generate and transmute. So it needs to be carefully stored and treated. Also, if stored as solid, it needs to be maintained below 0 °C and opened product should be burnt down soon because if it is left in air, dimer and urea factor will rapidly increase and it would cause the inferiority occurrence. 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.