COSMONATE PH-G -Technical Data Sheet-

1. Characteristics of Product

Cosmonate PH-G is a monomeric MDI, which does not contain BHT and TPP and is refined to be highly pure. It appears as a white crystal solid at room temperature. However, when in its liquid state, it is as clean and transparent as water. It is a monomeric MDI of 4,4' –, 2,4' – and 2,2' –diphenylmethane diisocyanate. It is a product with a linear structure and has two functional groups. In particular, even though BHT and TPP are not added, it is highly discoloring-resistant, which is the unique characteristic of a monomeric MDI, providing excellent stability in discoloration resistance to high temperature and ultraviolet light.

2. Product Application



Paint

SPANDEX

TPU Elastomer

Shoe Sole

Synthetic Leather

Cosmonate PH–G 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. Without using BHT and TPP at all, which are regulated because of their harmfulness to the human body, Cosmonate PH–G is a monomeric MDI. When it comes to the generation of dimer during storage, which is its unique characteristic, a series of processes, from shipment from the factory to application by users, will be managed completely with regard to temperature to help minimize the generation of dimer, helping maintain superior quality.

COSMONATE PH-G

3. Product standards & general properties

Item	Evaluation Method	Unit	Resuit
Product Standards Degree of Purity NCO Content APHA Color Tone H.C C/H Hydrolyzable chloric Viscosity (25°C) Specific Gravity (25°C)	ASTM D 1638 ASTM D 1638 ASTM D 1638 ASTM D 1638 Ie 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		– °C	White Solid
Freezing Point Freezing Point Evaporation Pressure (25°C) Ignition Molecular Weight		°C mmHg °C g/mol	38.7 0.01 196 250
Chemical Structure			
$OCN - \langle O \rangle - CH_2 - \langle O \rangle - NCO$			

COSMONATE PH-G

#roduct Packaging

Cosmonate PH uses 235kg 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

The proper temperature of cosmonate PH is 43~45°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.