KONNATE TM-20

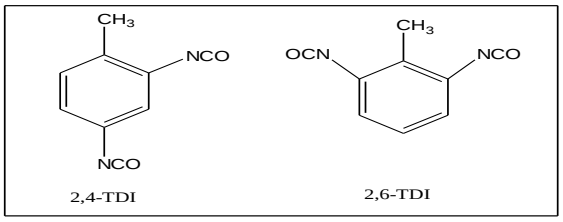
Mixed diisocyanate

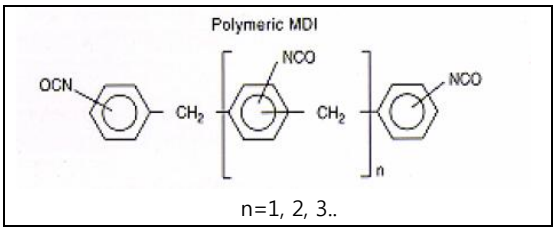
TECHNICAL DATA SHEET

DESCRIPTION

KONNATE TM-20 is a mixture of toluene diisocyanate (TDI) and polymethylene polyphenyl isocyanate (Polymeric MDI).

MOLECULAR STRUCTUR





PRODUCT SPECIFICATION

Items	Value
Appearance	Brown Liquid
NCO Content (%)	44.5±0.5
Hydrolyzable chloride (%)	Max. 0.10
Viscosity (at 25℃ cps)	Max. 15

PHYSICAL PROPERTIES

Specific Gravity at 25℃	1.23
Viscosity (at 25℃ cps)	20 max.
Boiling Point (℃ @ 760mmHg)	260
Flash Point (℃)	135
Freezing Point (℃)	about -4
Water Solubility	Reacts
Solvent Solubility	Soluble in aromatic hydrocarbons, nitrobenzene, acetone

APPLICATIONS

TM-20 can be used in the construction, furniture, automotive parts, electronics, and industrial.

STORAGE AND HANDLING

Observe all federal, state and local regulations when storing this substance. Protest against physical damage. Store in a cool, dry, well ventilated location, away from areas where the fire hazard may be acute. Outside or detached storage is preferred. If stored in tanks, it should be blanketed with an inert gas such as nitrogen or with dry air. Store away from incompatible substances.

The most favorable storage temperature for KONNATE TM-20 is between 20℃ and 30℃. Below about -4℃ KONNATE TM-20 may begin to freeze. If freezing or partial freezing occurs slowly heat the product to 20 ~ 30℃ to reliquify. The product must be thoroughly mixed before using to ensure uniform isomer distribution and reactivity.

SHIPPING INFORMATION

20,000 liter tank trucks and 250 kg non-returnable steel drums.

STABILITY AND REACTIVITY

Reactivity

*. Toluene diisocyanate

Reacts exothermically with water yielding carbon dioxide and an organic base.

*. Polymethylene polyphenyl isocyanate

Reacts slowly and exothermically on contact with water, generating sufficient heat and pressure to rupture the container in a closed system. Above 50℃, reaction may be vigorous.

Conditions to avoid

May be ignited by heat, sparks or flames. Container may explode in heat of fire. Vapor explosion and poison

hazard indoors, outdoors or in sewers.

Polymerization

*. Toluene diisocyanate

Slow, non-hazardous polymerization occurs above 113℉(45℃).

*. Polymethylene polyphenyl isocyanate

Polymerization may occur at temperature above 400℉(204℃), or upon contact with incompatible materials. Pressure build-up in closed container and explosive rupture are possible.

FIRE HAZARDS

TM-20 has a flash point of 135℃, and therefore, does not constitute a severe fire hazard as a combustible, non-flammable material. However, Slight fire hazard when exposed to heat or flame. Vapor air mixtures are explosive above flash point. In a fire situation, TM-20 may decompose to release toxic gases.

Please refer to the Material safety Data Sheet (MSDS) for more specific information.

========== **FOR MORE INFORMATION CONTACT** ==========

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