



ADVAFOAM SPF – MDI

DESCRIPTION

ADVAFOAM SPF- MDI is a diisocyanato-diphenylmethane(MDI)-based composition containing some higher functionality isocyanates. The functionality is about 2.6-2.7. It is a dark brown liquid at ambient temperatures.

ADVAFOAM SPF- MDI can be widely used in the production of rigid PU foam heat-insulating materials; also used in isocyanurate foam, paint, adhesives, structural foam, cellular integral skin foam, automotive bumper and interior parts, high-resilience foam and synthetic wood, etc. Due to its unique composition structure, ADVAFOAM SPF- MDI can provide better flowability. It is, therefore, particularly suitable for the production which require strict flowability of systems.

TECHNICAL SPECIFICATIONS

Appearance	Dark Brown Liquid
Specific gravity at 25°C	1.22-1.25
Viscosity at 25°C	150-250 mPa.S
NCO% Wt	30.2-32.0
Acidity (HCL)	≤0.05%
Hydrolyzable Chlorine	≤0.2%
Packaging	210L iron drums, 250kg/drum

SAFETY

ADVAFOAM SPF- MDI is of low toxicity by inhalation and skin absorption. The very low volatility of ADVAFOAM SPF- MDI means that it should be of little hazard for brief exposures under normal conditions, e.g. in cases of small spillages.

Nevertheless, ADVAFOAM SPF- MDI is an isocyanate-based composition and should be of certain toxicity. It may cause mild eye irritation and slight skin irritation. It may pose problems of skin sensitization. ADVAFOAM SPF- MDI has a Ceiling Threshold Limit Value, TLV(C) of 0.02ppm (0.2mg/m3).

It is important to note, however, that a vapour hazard will arise if the material is heated to temperatures above 400C (for instance when melted), or if it is reacted in an unventilated space.

Another hazard is the formation of air-borne droplets during spraying operations. Under such conditions, it is essential to wear a gas mask and a respirator since repeated inhalation of the vapour at levels above the TLV(C) could cause respiration sensitization. Even under normal conditions, ADVAFOAM SPF- MDI remains a reactive chemical and care should be taken when handling it to prevent its coming into contact with the skin and eyes. Suitable protective clothing such as glove, protective spectacles and work suit should be worn. Splashes on the skin or in the eyes should be removed promptly by irrigation with clean water and the skin should be well washed with soap and water. Since ADVAFOAM SPF- MDI is very easy to react with moisture and leads to the formation of carbon dioxide gas, containers must therefore be absolutely dry and sealed to protect from moisture and water. In case water splashes into the containers, be careful to avoid sealing it too tightly. It is important to leave holes to prevent containers from explosion.

Fire and Explosion Hazard

The MDI series is classified as a IIIB combustible liquid by NFPA. It is combustible when there is oxygen and high temperature. Explosion could occur when sealed or when water is present. Toxic fumes will form when MDI is burning. Fire fighters must wear full protective gear. Carbon dioxide, foam, or dry powder type fire extinguisher may be used. To avoid possible explosion, do not seal contaminated containers.

Spillage Handling

In case of spillage, immediately isolate area, remove fire source and make sure the area has adequate ventilation. Spillage handling should be conducted by trained personnel. Small amounts spilled can be covered with sand and treated with 5% ammonia off site. Collect and recycle is recommended if a large amount is spilled. Contaminated floor may be cleaned by ammonia or detergent. Waste product should be handled according to local environmental law.

The information given in this datasheet is based on both current development work and many years of field experience. Whilst every effort is made to ensure that the information is reliable, we cannot accept responsibility for any work carried out with our materials as we have no control over methods of application, site, conditions, etc.