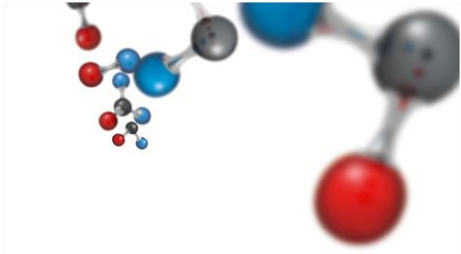
TECHNICAL DATA SHEET (TDS)
ONGRONAT® CO 2160



- **Product description:** ONGRONAT® CO 2160 is polymeric MDI with average functionality is 2.6 - 2.7.
- **Appearance:** Solvent free dark-brown low viscosity liquid at room temperature.
- **Features & benefits of the end product produced using ONGRONAT® CO 2160:** Mechanical and chemical resistance, Controlled surface temperature, Ease of application, Fire retardancy, Strong bonding
- **Industry:** Construction
- **Applications:** Adhesives & Binders, Pipe insulation

SPECIFICATIONS

Property	Value	Dimension	Test Method
NCO	30.0 - 32.0	wt%	BorsodChem Method PAK 155
Viscosity (at 25 °C)	170 - 230	mPa.s	ASTM D4889
Acidity as HCl	max. 200	ppm	BorsodChem Method PAK 126

OTHER PROPERTIES*

Property	Value	Dimension
Density (at 25 °C)	1.23	g/cm^3
Flash point	>200	°C
Vapour pressure (at 25°C)	$<10^{-5}$	mbar

*Values given in the "other properties" section are only typical ones, therefore they are not to be considered as part of the specification.

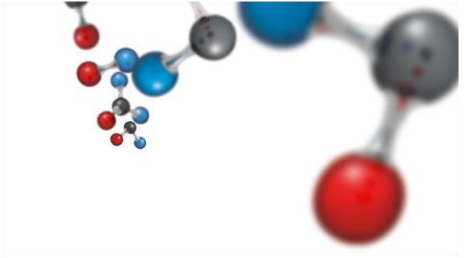
PACKING, STORAGE & TRANSPORT

Transport and packing: ONGRONAT® CO 2160 can be loaded and transported in road tankers, 1000 l containers, 250 kg non-returnable metal drums, or in metal cans under nitrogen blanket. The loading temperature is 40-45 °C in bulk and 20-30 °C in the case of drummed product, or in intermediate bulk containers (IBCs). Please note that based on the distance of the destination the delivery temperature may differ from the loading temperature, but still remains in the range of 20 - 45 °C delivering the product in bulk. In bulk, ONGRONAT® CO 2160 is shipped according to the above mentioned delivery temperature ranges in the lack of any special requirement.

Storage: It is recommended to store the product within the temperature range of 10 – 30 °C. Under these conditions the quality will be maintained for max. twelve (12) months from the date of production. Storing the product in drums or IBCs care must be taken to avoid cold shocks or overheating. (For instance overheating may be caused by the exposure of the drums or IBCs to intensive sunlight.) The material must be kept dry at all times; therefore it must be protected from water ingress and atmospheric moisture. In order to protect the material from atmospheric moisture a dry inert gas blanket (nitrogen) with a dew point of max. -40 °C must be applied into the containers (drums, IBCs or storage tanks). Dry air is not recommended for this purpose because it causes undesirable oxidation and due to this the colour of the product may become darker. It is not recommended to use carbon dioxide (CO_2) as an inert gas either, since it is soluble in isocyanates.

SAFETY PRECAUTIONS

Handle the material with care. Avoid contact with water and moisture. Reaction with water always results formation of CO_2 and therefore increase of pressure in the closed storage container. Avoid contact with skin and eyes. Do not inhale the vapours of the product. Detailed safety information available on the www.borsodchem-group.com website and in the specific Safety Data Sheet.



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Technical Data Sheet (TDS)
ONGRONAT® CO 2160

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