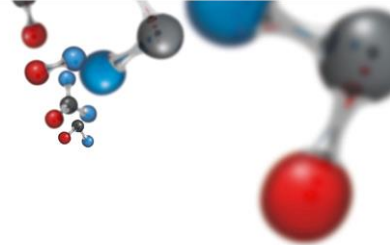


# TECHNICAL DATA SHEET (TDS)

## ONGRONAT® CO 4110



- **Product description:** ONGRONAT® CO 4110 is a polymeric MDI product with additives
- **Appearance:** Solvent free dark-brown liquid of low viscosity at room temperature
- **Industry:** Construction
- **Application:** ONGRONAT® CO 4110 is a type of chemically modified polymeric MDI. It is suitable for producing cavity filling silicate foams.

### SPECIFICATIONS

Property	Value	Dimension	Test method
NCO	29.0 – 31.0	wt%	ASTM D 5155
Viscosity (at 25 °C)	170 - 270	mPa.s	ASTM D 4889

### OTHER PROPERTIES\*

Property	Value	Dimension
Density (at 25 °C)	1.22	g/cm <sup>3</sup>
Flash point	>200	°C

\*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 4110 can be loaded and transported in road tankers, 1000 l containers (IBCs), 250 kg non-returnable metal drums, or in metal cans under nitrogen blanket. The loading temperature is 40–45 °C. 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 4110 is shipped according to the above mentioned delivery temperature range in the lack of any special requirement.

Storage: It is recommended to store ONGRONAT® CO 4110 within the temperature range of 10 – 30 °C. Under these conditions the product preserves its quality for max. six (6) months from the date of its 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

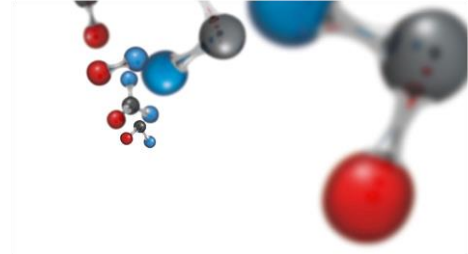
material must be kept dry at all times; therefore it must be protected from water ingress and atmospheric moisture. In order to protect the material from atmospheric moisture a dry inert gas blanket (nitrogen) with a dew point of -40 °C must be applied into the containers (drums, IBCs or storage tanks). 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<sub>2</sub>) as an inert gas either, since it is soluble in isocyanates..

### SAFETY PRECAUTIONS

All activities related to isocyanate handling are potential sources of danger; therefore special care must be taken when working with it. Handle the material with care. Avoid contact with water and moisture. Avoid contact with skin and eyes. Do not inhale the vapours of the product. Detailed safety information available in the specific Safety Data Sheet.

# TECHNICAL DATA SHEET (TDS)

## ONGRONAT® CO 4110



Version: English  
Date: 13.02.2017  
Technical Data Sheet (TDS)  
ONGRONAT® CO 4110

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