



ONGRONAT® ISOCYANATES

ONGRONAT® 1100

# TECHNICAL DATA SHEET

## Product

4-methyl-m-phenylene diisocyanate

## Appearance

At room temperature water clear liquid.

## Application area

The highly reactive diisocyanate chemicals are important materials used in reactions with various polyols and auxiliary materials to obtain miscellaneous type of material structures, like flexible foams, coatings or adhesives. The present product manufacturer provides one of the high purity components required for said applications and therefore the quality parameters are kept in a narrow range of tolerance which significantly contributes to exact reproducibility of formulations.

## Typical property range

TDI-isomers, total	: min. 99.5	wt%	BorsodChem method TVM-380
2,4 isomer	: min. 98.5	wt%	BorsodChem method TVM-340
Acid content (HCl)	: max. 10	ppm	BorsodChem method TVM-337-3
Hydrolizable chlorine (Cl)	: max. 25	ppm	BorsodChem method TVM-337-4
Total chlorine	: max. 150	ppm	BorsodChem method TVM-387
Colour	: max. 15	APHA	BorsodChem method TVM-337-1

## Other physical properties

Solidification temp.	: 22	°C
Density (at 25 °C)	: 1.21	g/cm <sup>3</sup>
Viscosity (at 25 °C)	: 3	mPa.s

## Transport and packaging

In tank road tankers, 250 kg non-returnable metal drums under nitrogen blanket.

## Storage

Recommended storage temperature: above the solidification point but possibly below 40 °C;

To avoid chemical reaction with water, contact with atmospheric humidity should be prevented;



Version: A  
Issue: 0  
Date: 01.01.2009.

TECHNICAL DATA SHEET  
ONGRONAT® 1100  
Page: 1 of 2

During the loading and the storage of the drummed products the instructions of ADR, RID, IMDG and the recommendation of ISOPA have to be widely observed.

The material should be used within 6 months from date of production (quality preservation can only be guaranteed through slightly observation of the above information). In case of delivery in drums the color cannot be warranted!

Warming up of the solidified product should be made with care under intensive continuous agitation. Quality features of re-heated ONGRONAT 1100 do not change. Discoloration occurs only after prolonged effect at high temperature.

## 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 Material Safety Data Sheet.



### BorsodChem Zrt.

H-3700, Kazincbarcika, Bolyai tér 1, Hungary  
H-1054, Budapest, Szabadság tér 7, Hungary

For further information please contact us via e-mail:

[isocyanates@borsodchem.hu](mailto:isocyanates@borsodchem.hu)

or visit our web-site:

[www.borsodchem.hu](http://www.borsodchem.hu)



Version: A

Issue: 0

Date: 01.01.2009.

TECHNICAL DATA SHEET

ONGRONAT® 1100

Page: 2 of 2