Magnesium Hydride, Grade G

CAS-No. 7693-27-8
EC-No. 231-705-3
Molecular Formula MgH₂
Product Number 458190

APPLICATION
This Magnesium Hydride has been developed by Evonik Industries. Evonik Industries owns the patent for applied production procedure.

Magnesium Hydride
- is non-pyrophoric
- reacts with water, acids or alkaline moderately under evolution of hydrogen gas
- does not contain any organic contamination or any other metal components.

It can be used as
- storage material for hydrogen
- reducing agent
- starting material for magnesium compounds or alloys
- foaming agent for metals
- starting material for nanoscaled or amor-phous metal powders.

SPECIFICATION

<table>
<thead>
<tr>
<th>Component</th>
<th>Requirement</th>
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<tbody>
<tr>
<td>MgH₂</td>
<td>min. 90 %</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>min. 6.7 %</td>
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PHYSICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>powder</td>
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<tr>
<td>Color</td>
<td>light gray</td>
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</table>
Magnesium Hydride, Grade G
Product Number: 458190
Date of Issue: 2016/09/02

Decomposition temperature
>= 284 °C

Bulk density
500 kg/m3

Water solubility
(practically insoluble) (H2-gas formation: > 1 L / Kg h)

Molecular weight
26.3 g/mol

Grain Size
average particle size ca. 50 µm

Thermal Stability
decomposition point = 284 °C

HANDLING & STORAGE

Storage
MgH2 should be stored in dry areas and preferably in its original closed packaging.

TRANSPORT & PACKAGING

UN number 1409

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<th>PG: II</th>
<th>Label: 4.3</th>
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Hazard pictograms

Signal Word
Danger

H&P Phrases
See Safety Data Sheet

Labelling
The labelling is according to EU-GHS classification ((EG) 1272/2008) and may vary in other countries. Please refer to the respective Safety Data Sheet for your country.
OTHER INFORMATION

Further Related Documents
Safety Data Sheet