

# Product Handling Information Sheet

HM 2472 R (UP GM 205)

## 1. Company

|              |                                                                                                                                                                                 |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
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|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## 2. Product Description

|                                |                                                                                                                           |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Product                        | Technical semi-finished product (sheet / rod / tube)                                                                      |
| Standard designation           | HM 2472 R acc. to DIN 7735 / UP GM 205 acc. to EN 60893 (glass-mat reinforced polyester resin hard laminate)              |
| Characterisation               | Thermoset laminate made of glass-fibre mats, impregnated with unsaturated polyester resin and pressed under heat/pressure |
| Main components                | <ul style="list-style-type: none"> <li>• Unsaturated polyester resin (UP)</li> <li>• Glass-fibre mat</li> </ul>           |
| Components requiring labelling | none                                                                                                                      |
| Classification under REACH     | Article                                                                                                                   |
| Notes                          | Not declared as a food contact material.                                                                                  |

## 3. Product Properties

|                                       |                                                                                  |
|---------------------------------------|----------------------------------------------------------------------------------|
| Form/State                            | <ul style="list-style-type: none"> <li>• solid (thermoset)</li> </ul>            |
| Colour                                | white                                                                            |
| Odour                                 | <ul style="list-style-type: none"> <li>• odourless</li> </ul>                    |
| Density                               | ~1.80 g/cm <sup>3</sup>                                                          |
| Limiting temperature (continuous use) | 155 °C (thermal class F)                                                         |
| Ignition temperature                  | approx. 400–450 °C                                                               |
| Thermal decomposition                 | > approx. 300 °C (release of decomposition products, possibly traces of styrene) |
| Combustion behaviour                  | flame-retardant (UL 94 V-0)                                                      |
| Notes                                 | –                                                                                |

## 4. Hazard Information

|                                                  |                                                                                                                                                                                            |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Particular hazards to humans and the environment | none (in cured state)                                                                                                                                                                      |
| Notes                                            | Glass-fibre/resin dust generated during machining should not be inhaled and may cause skin or respiratory irritation. Overheating or burning may release hazardous decomposition products. |

## 5. Handling and Storage

|                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Handling               | <ul style="list-style-type: none"> <li>• The product can be machined with standard commercial machinery (sawing, milling, drilling, turning).</li> <li>• Ensure dust extraction during machining (glass-fibre/resin dust).</li> <li>• Use sharp, carbide-tipped tools; increased tool wear due to glass-fibre reinforcement is possible.</li> <li>• As a thermoset, it cannot be reshaped or welded.</li> <li>• Avoid skin contact when dust is generated (mechanical skin irritation from glass fibres possible).</li> </ul> |
| Storage recommendation | <ul style="list-style-type: none"> <li>• horizontal</li> <li>• dry</li> <li>• protected from direct UV/sunlight exposure</li> <li>• protected from contamination</li> </ul>                                                                                                                                                                                                                                                                                                                                                   |
| Protective measures    | Extraction / respiratory protection in case of dust formation; gloves recommended                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Shelf life             | –                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Notes                  | –                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

## 6. Transport

|           |                                                                                                                    |
|-----------|--------------------------------------------------------------------------------------------------------------------|
| Transport | <ul style="list-style-type: none"> <li>• Not classified as dangerous goods under transport regulations.</li> </ul> |
| Packaging | –                                                                                                                  |
| Notes     | –                                                                                                                  |

## 7. Fire-Fighting Information

|                               |                                                                                                                                                                                       |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Suitable extinguishing media  | <ul style="list-style-type: none"><li>• Water</li><li>• Foam</li><li>• Dry extinguishing agent</li><li>• CO<sub>2</sub></li></ul>                                                     |
| Possible combustion products  | <ul style="list-style-type: none"><li>• Carbon monoxide</li><li>• Carbon dioxide</li><li>• Smoke</li><li>• possibly traces of styrene</li></ul>                                       |
| Required protective equipment | <ul style="list-style-type: none"><li>• Firefighters and others exposed to combustion products should wear full protective clothing and self-contained breathing apparatus.</li></ul> |
| Notes                         | Collect fire residues and dispose of them in accordance with local regulations.                                                                                                       |

## 8. Disposal Information

|                    |                                                                                                                    |
|--------------------|--------------------------------------------------------------------------------------------------------------------|
| Recyclability      | Thermoset, glass-fibre reinforced; material recycling not possible, thermal recovery possible to a limited extent. |
| EU Waste Catalogue | The product is not classified as hazardous under the European Waste Catalogue (EWC).                               |
| Disposal           | Dispose of in suitable incineration plants in accordance with local regulations.                                   |
| Waste code no.     | <ul style="list-style-type: none"><li>• 07 02 13 - plastic waste</li></ul>                                         |
| Notes              | -                                                                                                                  |

## 9. Labelling, Directives and Regulations

|                                |                                       |
|--------------------------------|---------------------------------------|
| Labelling under EEC directives | not subject to labelling requirements |
| Notes                          | -                                     |

## 10. REACH Information

|             |                                                                                                                                                                                                                      |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Information | In accordance with EC Directive 1907/2006/EC (REACH), Article 3, No. 3, our products are articles that are not subject to registration. Our products are articles under REACH, therefore no SDS requirement applies. |
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## 11. Other Information

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|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Other information | The above information is based on our current state of knowledge and does not constitute a warranty of properties. Existing laws and regulations must be observed by the recipient of our product on their own responsibility. |
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