



## 1. Producer / supplier

Mitsubishi Chemical Advanced Materials I.P. Noord - Galgenveldstraat 12

B - 8700 Tielt Tel.: +32/(0)51/42 35 11 Fax: +32/(0)51/42 33 00

## 2. Product description

**TIVAR<sup>®</sup> Oil Filled PE-UHMW** Commercial product name: These products are 'articles' according to the Regulation (EC) No 1907/2006 (REACH).

Material characterization:

Ultra high molecular weight polyethylene + oil [PE-UHMW]

## 3. Product characteristics

4. Handling and storage

Storage:

Form:	semi-finished products (plates) / finished parts machined from semi-finished products	
Colour:	grey	Test methods
Odour:	odourless	
Density:	0.93 g/cm <sup>3</sup>	ISO 1183-1
Melting temperature:	135 °C	ISO 11357-1/-3
Glass transition temperature:	- Values for this property are only given here for amorphous materials	ISO 11357-1/-2 s and not for semi-crystalline ones.
Thermal decomposition:	> 300 °C	
Self-ignition temperature:	> 330 °C	ASTM D 1929
Solubility in water:	insoluble	

Machining: During machining of the semi-finished products, evacuate swarf to prevent slipping or tripping hazard and observe the maximum allowable concentration of dust levels on the workplace which apply in your country. Wear safety goggles during machining. The products shall be stored indoors in a normal environment (air at 10 - 30°C /

30 - 70% RH) and kept away from any source of degradation such as sunlight, UV-lamps, chemicals (direct or indirect contact), ionising radiation, flames, etc. Dimensional changes (camber, warpage, shrinkage ...) of the products as well as slight colour shifts of the external surfaces can occur with time. The latter does generally not pose a problem in case of semi-finished products since the surface-layer is mostly removed anyway upon machining them into finished parts.

Standard industrial safety recommendations shall be observed. Temperatures above the melting temperature shall be avoided.

Please also note the disclaimer on page 2 of this document.

Safety measures:

PRODUCT HANDLING INFORMATION SHEET

## **TIVAR® Oil Filled UHMW-PE**



Fire-fighting measures		
Suitable extinguishing media:	Water, foam, dry chemical, CO2. Adapted to the nature and extend of fire.	
	oducts: The main products formed in case of overheating and combustion are carbon monoxide and carbon dioxide. Formation of further hazardous decomposition products depends upon the fire conditions and cannot be excluded.	
	Firemen should wear self-contained breathing apparatus and protective clothin to prevent contact with skin and/or eyes. If exposed to combustion fumes in a high concentration, bring the victim into fresh air. If molten material contacts skin, cool rapidly with cold water and obtain medical attention for removal of adhering material and treatment of the burn.	
Disposal considerations		
products is not classified as hazar	<ul> <li>Ste Catalogue and Hazardous Waste List', uncontaminated waste from the ardous. The following six-digit codes can be used:</li> <li>07 02 13 waste plastic from the manufacture, formulation, supply and use of plastics</li> <li>12 01 05 plastic shavings and turnings</li> <li>16 01 19 plastic, from end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance</li> </ul>	
	<ul> <li>17 02 03 plastic construction and demolition wastes</li> <li>20 01 39 plastics from municipal wastes (household waste and similar commercial, industrial and institutional wastes)</li> </ul>	
	When recycling is not feasible, waste disposal by incineration or landfill can be applied. Disposal methods shall conform to local or other government regulations. The products do not contain cadmium pigments or cadmium stabilisers. They are not biologically degradable, but based on the present state of knowledge negative effects on the environment may be anticipated.	
Marking and transport info	ormation	
	Hazard warning labelling in accordance with relevant EC-Directives is not required.	
International transport regulation	ons: Not applicable	
Other information		

TIVAR<sup>®</sup> is a registered trademark of Mitsubishi Chemical Advanced Materials.

All statements, technical information, recommendations, and advice are for informational purposes only and are not intended and should not be construed as a warranty of any type or term of sale. The reader, however, is cautioned that Mitsubishi Chemical Advanced Materials does not guarantee the accuracy or completeness of this information and it is the customer's responsibility to test and assess the suitability of the products of Mitsubishi Chemical Advanced Materials in any given application or for use in a finished device.