



Technical Data Sheet

VORASTAR™5342WP



Description

VORASTAR™5342WP is a fast curing two-part, high performance pure polyurea membrane. This liquid applied elastomeric system is designed and certified for use in applications where **potable water** is retained or as a barrier protection from aggressive ground water containing chemicals is required, such as reservoirs, storage tanks and water basins. Applied to protect concrete or metal surfaces against highly aggressive chemicals, corrosion, erosion, and impact its high elongation and tear strength properties gives it outstanding crack bridging properties and the ability to withstand temperature variation, dynamic forces.

VORASTAR™ 5342WP meets the requirements for Water Regulations Advisory Scheme approval to BS 6920-1:2000 for use with hot and cold water.

VORASTAR™ 5342WP is designed for use through 1:1 volumetric spray equipment.

Typical uses: Protective coatings, Desalination & Power plants, Tank coatings/linings, Bridge Deck waterproofing, Roof coatings, Walkways and balconies, Flooring and Car parking decks, Industrial and manufacturing facilities, Landscape and water containment, Sewage and Wastewater Treatment plants

Typical Component Properties

	Units	VORASTAR™ 5342WP Resin	VORASTAR™ 5342WP Prepolymer	Test Method
Appearance @ 25°C		Yellow liquid	Yellow liquid	
Viscosity at 25°C	cps	350 – 650	1500 – 2500	ASTM D4287
Specific Gravity @ 25°C	g/cm ³	1.00	1.00	ASTM D1475
Flash Point	°C	>200	>200	DIN 52578

These are typical values and should not be construed as specifications.

Recommended Process Conditions

	Units	Limits
VORASTAR™ 5342WP Resin	Pbv	1.00
VORASTAR™ 5342WP Prepolymer	pbv	1.00
Processing Temperature	°C	70 – 85 (Resin – Isocyanate)
Typical component pressures	bar	150-180

These are typical values and should not be construed as specifications.

Typical Reaction Characteristics ⁽¹⁾

	Units	Values
Gel Time (100gms @ 25°C)	s	3-8
Tack-free time	min	5
Post cure time	hours	24
Final hardness	days	2

1. Values refer to tests conducted using a high-pressure machine processed according to "Recommended Process Conditions". These are typical values and should not be construed as specifications.

Handling and Storage

	Units	VORASTAR™ 5342WP Polyol	VORASTAR™ 5342WP Prepolymer
Recommended Storage temperature	°C	15-25	15-25
Storage stability / Shelf life ⁽¹⁾	months	12	12

2. Stored in the original sealed drums in a dry place at the recommended temperature

Typical Properties of Cured System

	Units	Limits	Test Method
Shore Hardness	Shore D	62	DIN 53505
Tensile Strength	N/mm ²	32.2	DIN 53504
Elongation at Break	%	340	DIN 53504
Tear Resistance	N/mm	126	DIN 53515
Taber Abrasion	mm ³	80	DIN 53516
Density	g/cm ³	1	DIN 53420

These are typical values and should not be construed as specifications.

Precautions

The use of this two-component system requires special precautions. Please refer to the material safety data (MSD) sheet before using. Avoid inhalation of the vapor and contact with skin and eyes. Working areas should be well ventilated with fresh air.

Use protective gloves and goggles. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. In case of contact with skin, wash immediately with plenty of water and soap. During spray application, wear suitable respiratory equipment.

Product Stewardship

The Dow Chemical Company and its subsidiaries ("Dow") has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our Product Stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our Product Stewardship program rests with each and every individual involved with Dow products — from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

Safety Considerations

Material Safety Data (MSD) sheets are available from The Dow Chemical Company. MSD sheets are provided to help customers satisfy their own handling, safety and disposal needs and those that may be required by locally applicable health and safety regulations. MSD sheets are updated regularly, therefore, please request and review the most current MSD sheet before handling or using any product. These are available from the nearest Dow sales office.

Customer Notice

Dow encourages its customers to review their application of Dow products from the standpoint of human health and environmental quality. To help ensure that Dow products are not used in ways for which they were not intended or tested, Dow personnel will assist customers in dealing with ecological and products safety. Your Dow sales representative can arrange the proper contacts.

Contact information:

For more information about this product please call The Dow Chemical Company.

North America: 1-800-447-4369
Latin America: (+55) 11-5184-8722
Europe: (+31) 11-567-2626
Asia/Pacific: (+60) 3-7965-5392
<http://www.dow.com/pusystems/index.htm>

NOTICE: No freedom from infringement of any patent owned by Dow or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other government enactments. The product shown in this literature may not be available for sale and/or available in all geographies where Dow is represented. The claims made may not have been approved for use in all countries. Dow assumes no obligation or liability for the information in this document. References to "Dow" or the "Company" mean the Dow legal entity selling the products to Customer unless otherwise expressly noted. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED

