



Technical Data Sheet

DOWSIL™ 1606 Premium Polyurethane Foam

DOWSIL™ 1606 Premium Polyurethane Foam is single-component, self-expanding, ready-to-use, PU-foam with excellent adhesion and filling capacity for fixing and insulation of doors, windows, electrical outlets and water pipes.

Features & Benefits

DOWSIL™ 1606 Premium Polyurethane Foam is used with an applicator gun and features higher yield, easier application and reusability. It does not contain any propellant gases that are harmful to the ozone layer.

Features:

- Excellent adhesion and filling capacity and high thermal and acoustical insulation value.
- Excellent stability (no shrinkage).
- Not UV resistant.
- Economical consumption thanks to precise application. High yield up to 45 liters, depending on temperature and humidity.
- Mold-proof, water-proof and over paintable.

Benefits:

- Adheres to almost all building materials with the exception of surfaces such as polyethylene, Teflon, silicone and surfaces contaminated with oils and greases, mold release agents and similar materials.

Applications

DOWSIL™ 1606 Premium Polyurethane Foam specifically developed for:

- Fixing and insulating of door and window frames.
- Filling and sealing of gaps, joints and cavities.
- Filling of penetrations in walls.
- Insulating electrical outlets and water pipes.

Typical Properties

Specification Writers: These values are not intended for use in preparing specifications.

Test ¹	Property	Unit	Result
	Basis		Polyurethane prepolymer
	Curing System		Moisture cure
DIN 53479	Specific Gravity	kg/m ³	22 ± 3
ASTM C1620	Tack-Free Time (1 cm Width)	min.	7 ± 3
ASTM C1620	Cutting Time (1 cm Width)	min.	30–45
	Cure Time	hours	24
	Foam Color		Light yellow
ASTM C1536	Yield	L	30–45
DIN 4102-1	Fire Class of the Cured Foam		B3
DIN 52612	Thermal Conductivity at 20°C	W/(m·K)	0.036
DIN 53421	Compression Strength	MPa	0.03
ISO1926-79	Tensile Strength	MPa	0.08
ISO2896-87	Water Penetration		0
DIN 53428	Water Absorption (Vol.)	%	Max. 1
ISO2796 / 86	Dimensional Stability	%	±10
	Temperature Resistance (Cured Foam)	°C	-40 to +80
	Application Temperature (Ambient and Surface)	°C	+5 to +30

1. DIN: Deutsche Industrie Norm
ASTM: American Society for Testing and Materials
ISO: International Standardization Organization

Note: The above values are obtained typical lab conditions. These values are not for use in preparing specifications. Please contact Dow representative for specification values.

How to Use

Step 1 Surface Cleaning:

Substrates must be sound quality, clean, dry and free of dust, grease, rust and other contaminants which may affect the adhesion. Sprinkle the working surface with water (with gardening sprinkler for example) at temperature > 5°C.

Step 2 Product Preparation:

If the can is too cold / hot then the can should be brought to room temperature, e.g. by immersion in cold / warm water or leaving it in room temperature for at least 24 hours. Optimal can temperature is +20°C. Application temperature is in between +5°C to +30°C.

Step 3 Foam Application:

Put on protective gloves. Shake the can well before use. Screw the can onto the applicator. Hold the can upside down and activate the foam by pressing the valve. Always handle the canister with the valve pointing downwards. Moisturizing the surfaces and the foam improves adhesion and shortens curing time. Vertical gaps should be filled with foam starting at the bottom and moving up. Do not fill the entire gap — the foam will increase in volume.

How to Use (Cont.)

Step 4 Tooling and Finishing:

Immediately after full foam hardening, it should be secured against exposure to UV rays by using e.g. plaster or paints. The manufacturer recommends using the entire can without stopping more than 5 minutes between spraying due to foam drying in the applicator.

Contains Diphenylmethane-4, 4'-Diisocyanate. Harmful by inhalation. Irritating to eyes, respiratory system and skin. Do not breathe spray/vapor. Wear suitable protective clothing and gloves. Use only in well-ventilated areas. Pressurized container. Keep away from direct sunlight and do not expose temperatures over 50°C. Do not pierce or burn, even after use. Keep away from sources of ignition, no smoking. Keep out of the reach of children.

Meets or exceeds the requirements of the following specifications:

STANDARDS:

The French VOC requirements for class A+.

- The requirements of VOC content specifications in LEED credit EQc4.1
- "Low-emitting products" of SCAQMD rule 1168

Required Testing in the Application

It is the responsibility of the end user to thoroughly test any proposed use of the foam and independently conclude satisfactory performance in the application.

Handling Precautions

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE ON THE DOW WEBSITE AT DOW.COM, OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.

Usable Life and Storage

When stored at or below 25°C in the original unopened containers, this product has a usable life of 15 months from the date of manufacture. Refer to product packaging for expiry date.

Packaging Information

DOWSIL™ 1606 Premium Polyurethane Foam is supplied in 750 ml can.

Limitations

- The curing process is dependent on temperature and humidity. The decrease in ambient temperature within 24 hours after the application below the minimum application temperature can affect the quality and / or correctness of the seal.
- Hurried attempts at preliminary treatment may cause irreversible changes in foam structure and its stability and may affect deterioration of foam utility parameters.
- Quality and technical condition of used applicator affect the parameters of final product.
- The foam should not be used in spaces without access of fresh air and poorly ventilated or in places exposed to direct sunlight.
- Working in other position than "valve facing down" will decrease foam's efficiency. Should be stored and transported in vertical position.
- Cured foam will discolor if exposed to ultraviolet light.
- Paint or coat the cured foam for best results in outdoor applications.
- Lower temperatures decrease yield and curing time.

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

Health and Environmental Information

To support customers in their product safety needs, Dow has an extensive Product Stewardship organization and a team of product safety and regulatory compliance specialists available in each area.

For further information, please see our website, dow.com, or consult your local Dow representative.

Disposal Considerations

Dispose in accordance with all local, state (provincial) and federal regulations. Empty containers may contain hazardous residues. This material and its container must be disposed in a safe and legal manner.

It is the user's responsibility to verify that treatment and disposal procedures comply with local, state (provincial) and federal regulations. Contact your Dow Technical Representative for more information.

Product Stewardship

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.

Customer Notice

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow.

dow.com

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