

TECHNOMELT® 0450

June 2025

PRODUCT DESCRIPTION

TECHNOMELT® 0450 provides the following product characteristics:

Technology	Hot melt adhesive
Chemical type	Polyolefin
Appearance	Off white
Components	One component
Viscosity	Low medium
Cure	Physical setting
Application	Bonding, general assembly
Application temperature, °C	177°C to 190°C (350°F to 375°F)
Specific benefits	<ul style="list-style-type: none">• Good heat stability• Good heat resistance• Broad substrate adhesion

TECHNOMELT® 0450 is a one-component industrial grade Polyolefin Hot Melt Adhesive. Once applied TECHNOMELT® 0450 solidifies to form a soft pliable adhesive with good heat stability, heat resistance and bond strength. Typical applications include air spray applications. It is a versatile adhesive for many substrates such as expanded polystyrene or urethane foams, corrugated, wood, fabrics, and plastics.

TYPICAL PROPERTIES

Specific gravity @ 25°C	
ASTM D792	0.94
Softening point, °C	
ASTM E28-67	111
Application viscosity ASTM D 3236 (RVT, spindle 27), mPas (cP)	
@160°C	6,000
@177°C	4,500
@190°C	3,000
@204°C	2,300
Open time sprayed, min	5 – 8
Heat resistance, ASTM D4498, °C	69
Glass Transition Temperature (Tg), ASTM E1640, °C	-26

TYPICAL PERFORMANCE

Tested @ 22°C	
Shore hardness, Durometer A	45
ASTM D2240	

Tested after 5 days @ 22°C

Lap shear strength vs. Substrate
ASTM D1002

Steel (grit blasted)	N/mm ² (psi)	0.90 (131)
Anodized aluminum	N/mm ² (psi)	1.80 (261)
Zinc dichromate	N/mm ² (psi)	0.58 (84)
Polycarbonate	N/mm ² (psi)	0.26 (38)
G-10 Epoxy	N/mm ² (psi)	0.25 (36)
LDPE	N/mm ² (psi)	0.54 (78)

Block shear strength, vs. Substrate,
ASTM D4501

Polypropylene	N/mm ² (psi)	1.34 (195)
HDPE	N/mm ² (psi)	1.20 (174)
Polyester	N/mm ² (psi)	1.20 (174)

GENERAL INFORMATION

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.

For safe handling information on this product, consult the Safety Data Sheet (SDS).

Directions for use

1. Use gloves to minimize skin contact. DO NOT use solvents for cleaning hands.
2. The surfaces of the substrate must be dry and free from oil, grease, and dust.
3. Hotmelt application system with LOCTITE® 175-Spray Applicator is recommended. Please read the Operating and Service Manual before operating the applicator.
4. Allow the applicator to reach operating temperature before applying the adhesive; about 10 minutes.
5. A one-inch wide spray pattern is optimum. Adjust the set screw on the applicator to increase or decrease the spray width.



6. TECHNOMELT® 0450 adhesive should be sprayed 6-9 inches above the substrate with the best bonding results achieved when the substrates are bonded immediately.
7. TECHNOMELT® 0450 should be thoroughly dusted with the powder from the carton. Before using a new carton, simply roll the carton to redistribute the powder.
8. When bonding to a substrate with high thermal conductivity the use of a specific application temperature is required for good wetting.
9. Do not heat the product above the specified application temperature range.
10. When the product is not in use do not apply heat, this will degrade the quality of the product and in extreme cases cause carbonization or charring.
11. Carbonized material must be removed mechanically.
12. To internally clean the system add TECHNOMELT® PUR CLEANER TECHNOMELT® CLEANER MELT-O-CLEAN to reservoir and continue to purge material until it comes out in blue color.
13. For cold cleaning of surface soiling on application equipment, conveyor belts or other machine parts TECHNOMELT® CLEANER MELT-O-CLEAN can be applied. It is based on natural citrus extract and facilitates manual cleaning even in case of pronounced charring. Before using TECHNOMELT® CLEANER MELT-O-CLEAN, its suitability for lacquered and synthetic coated surfaces should be tested.

Storage

Store product in an unopened container in a dry location. Storage information may be indicated on the product container labeling.

Optimal Storage: Up to 28°C. Storage above 35°C can adversely affect the ability to handle and dispense the material.

Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Henkel representative.

Product specification

The technical data contained herein are intended as reference only and are not considered specifications for the product. Product specifications are located on the Certificate of Analysis or please contact Henkel representative.

Approval and certificate

Please contact Henkel representative for related approval or certificate of this product.

Data ranges

The data contained herein may be reported as a typical value. Values are based on actual test data and are verified on a periodic basis.

Temperature/Humidity Ranges: 23°C / 50% RH = 23±2°C / 50±5% RH

Conversions

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$
 $\text{kV/mm} \times 25.4 = \text{V/mil}$
 $\text{mm} / 25.4 = \text{inches}$
 $\mu\text{m} / 25.4 = \text{mil}$
 $\text{N} \times 0.225 = \text{lb}$
 $\text{N/mm} \times 5.71 = \text{lb/in}$
 $\text{N/mm}^2 \times 145 = \text{psi}$
 $\text{MPa} \times 145 = \text{psi}$
 $\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$
 $\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$
 $\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$
 $\text{mPa}\cdot\text{s} = \text{cP}$

Disclaimer

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