



TEROSON[®]

Technical Product Bulletin TEROSON[®] PV 1273

(KNOWN AS TEROSTAT[®] 06-1273)
May 2013

1/9/2014
Issued

Product Type

Pumpable, 200% Expansion, Weld Through, Gas Resistant, High Wash-Off Resistant PVC Epoxy Based Sealant

Substrate Type

Metal to Metal

Application

TEROSON PV 1273 (known as TEROSTAT 06-1273) is capable of being applied over oily galvanized and oily cold rolled steel. For application in anti flutter, spot weld seams, fender, roof bow, body stiffeners and seal hinges.

Product Technology

TEROSON PV 1273 (known as TEROSTAT 06-1273) is a pumpable, 200% expansion, weld through, gas resistant, controlled expansion body shop sealer designed for oily or galvanized steel. It has enhanced shear adhesion, gas resistant and is highly wash-off resistant. These pumpable mastics, profile tapes and die cuts are a family of rubber-based adhesives for body in white applications. They offer good corrosion resistance, high elasticity, and bond without read-through. Application can be manual or automated.

Typical Properties

Property	Typical Results
Color	Black
Odor	None
Consistency	Paste
Solids	97% Minimum
Specific Gravity	1.22 ± 0.05
Curing Mechanism	Heat Cure
Viscosity (0.125" Orifice, 20g, 25°C, 40 psi)	200 - 350 seconds
Sag	<1 mm
Pressure Stability (SAE J1864) 22400 kPa for 76 Hours	0 ml
Adhesion Initial Cycle F – 12 cycles (Heat, Salt Spray, Freezer) Heat Aging (336 Hours at 70°C) Humidity (168 Hours at 38°C, 100% RH)	100% Cohesive 100% Cohesive 100% Cohesive 100% Cohesive
Cold Slam (10 Slams at -30°C)	100% Cohesive with No Cracking
Mandrel Bend	100% Cohesive with No Cracking
Tensile Strength (ASTM D638)	520 kPa minimum
Shear Strength - 0.030" Bondline	640 kPa
Elongation to Break	100%

Property	Typical Results
Corrosion Resistance (Material Bake 1 hour at 200°C) Initial	100% Cohesive with No Corrosion
Humidity (168 Hours at 38°C, 100% RH)	100% Cohesive with No Corrosion
Smoke	No Smoke
Flash Point	>200°C
Flame Resistance	> 50 Passes
Wash-Off Resistance	No loss of material
Volume Expansion	200 – 250%
Vertical Rise Expansion	125%
Fuel Resistance	No loss of adhesion
Weldability	>1000 Welds
E-Coat Compatibility	9+
Application Temperature	Ambient

Operating Summary

- It is recommended that testing is completed on substrates to be used to validate this material prior to use.
- To obtain optimum strength the following cure conditions have proven successful:
 - >20 min @ 165°C metal temperature
 - <30 min @ 205°C metal temperature
- Deviations from cure cycle may result in deviations from the shear strength which may interfere with material performance.

General Information

- Shutdown - For extended shutdown periods, greater than 8 hours, it is recommended that pressure be removed from the system to reduce possibility of caking in lines.
- Material Purge - Regular purge and cleaning of the application system is recommended, please contact your sales representative for material requirements and instructions.
- As with all materials, it is recommended that to ensure consistent material, this product is used in a First In - First Out stock rotation system.

Equipment

- It is recommended that this material be dispensed using a pumping system. This should include a high pressure ratio pump, with recommended ratio of 55:1 or greater. Care should be taken in system design to insure that flow restrictions are minimized. Flow restrictions occur when headers, hoses, and/or nozzles are too small for the application. By reducing flow restriction, it is possible that lower ratio pumps can be used.
- Equipment with piston, gear, or rotary pumps is suitable for the application of TEROSON PV 1273 (known as TEROSTAT 06-1273) from drums or pails.

Metal Surface Preparation

- This material has been developed to adhere to a wide variety of material surfaces. While no pre-cleaning of the substrate is required, removal of excess lubricants is desired and clean substrate is preferred.
- Cleaning of the substrate can be through chemical and/or mechanical methods.
- For best performance, substrate should be free of contamination before material is applied.

Product Removal

- Fresh, uncured material can be removed with the aid of Isopropyl Alcohol. Large amounts of material can be removed using towels or rags and then cleaned with Isopropyl Alcohol.
- Cured material can only be removed mechanically

Health and Safety

- **For safe handling information on this product, consult the Material Safety Data Sheet (MSDS).**
- Prior to application it is necessary to read the Safety Data Sheet for information about precautionary measures and safety recommendations.
- For chemicals exempt from compulsory labeling, the relevant precautions should always be observed.

Product Control Test Method

- No specific test methods are recommended to be used by customer.
- Additional information on product testing is available upon request.

Storage Requirements

- Store product in the unopened container in a dry location
- **Keep away from heat and direct sunlight.**
- **Store between 10°C and 30°C (50°F and 86°F)**
- **Material is frost sensitive**
- **Shelf life of product is 120 days.**
- Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel Corporation 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 Technical Service Center or Customer Service Representative.

Waste Disposal

- Refer to MSDS for further information

Order Information

- Bulk IDH Number **768333**
- Please call for available packaging

Creation Date 07 January 2003
Revision Date 21 May 2013 **Revision Number** 5

Revision History

04.21.09 Updated to new format
05.21.13 Updated storage conditions and temperatures.
Updated name due to rebranding. Updated Viscosity value

Conversions

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$
mm / 25.4 = inches
 $\mu\text{m} / 25.4 = \text{mil}$
N x 0.225 = lb
N/mm x 5.71 = lb/in
 $\text{N}/\text{mm}^2 \times 145 = \text{psi}$
MPa x 145 = psi

Trademark usage

Except as otherwise noted, all trademarks in this document are trademarks of Henkel Corporation in the U.S. and elsewhere. ® denotes a trademark registered in the U.S. Patent and Trademark Office.

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, **Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.** The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

