



# TEROSON®

## Technical Product Bulletin TEROSON® AL 7163

December 2017

### Product Type

Waterborne, One Component Acoustic Coating for Vibration Damping, Heat Cure

### Substrate Type

ED Coated Metal

### Application

TEROSON AL 7163 is applied in the paint shop to strategic areas of the vehicle requiring vibration damping.

### Product Technology

TEROSON AL 7163 is a waterborne compound that is spray applied using airless equipment. The material can be dried at a minimum temperature of 20°C, but for maximum vibration damping material needs to heat cure. TEROSON AL 7163 is a Vibration Damping coating which is designed to allow the user to eliminate their current interior acoustic melt sheets.

### Typical Properties

Property	Typical Results
Wet Color	Dark Blue (dries black)
Odor	Mild
Consistency	Viscous Liquid
Solids	70 – 80%
Specific Gravity	1.5 – 1.6
Curing Mechanism 2mm wet film	Heat Cure – 20 minutes at 140°C
Brookfield Viscosity Spindle #7, 20rpm, 77F	50 – 150 Pas
<u>Adhesion to E-coat</u>	
Initial	Excellent
Heat Aging (1 hours at 160°C)	Excellent
Expansion (%)	40 to 70
Corrosion Resistance 10 days salt spray (2mm wet)	No corrosion
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 maximum vibration damping the following cure conditions have proven successful:
  - > 20 min @ 140°C metal temperature
- Deviations from cure cycle may result in deviations from the vibration damping 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

- Equipment with piston or rotary pumps is suitable for the application of TEROSON AL 7163.
- 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.
- Application of the product is carried out either manually or by an automatic application system (CNC or robot), often using heads especially designed to give particular bead characteristics.
- If required, we will provide you with the necessary information on suitable application equipment.

### Metal Surface Preparation

- This material has been developed to adhere to electro-coated metal surfaces that have been cleaned, treated, and primed.
- This material will not adhere to untreated metal.
- 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 water. Large amounts of material can be removed using towels or rags and then cleaned with water.
- 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)**
- **Shelf life of product is 90 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.

## Conditions for Use

- Material Temperature: 20° - 30°C
- Material Cure Temperature: 20° - 140°C

## Waste Disposal

- Refer to MSDS for further information

## Order Information

- Bulk IDH Number **2286193**
- Please call for available packaging

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## Conversions

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

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## REVISION HISTORY

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