Technical Data Sheet Aerospace Coatings



DESOPREP™ 4000 Thin-Film Pretreatment

Product description

DESOPREP™ 4000DM/DR (DP4000DM/DR) system is a zirconium-based thin-film pretreatment formulated to provide excellent corrosion resistance for steel, galvanized steel, and aluminum substrates.

- Free of chromates and other chromium compounds
- A single process line can be used to pretreat ferrous and non-ferrous substrates (i.e. steel, aluminum and mixed metals)
- DP4000 is designed to be used as part of a coating system stack-up
- DP4000DM is used to charge the initial bath, while DP4000DR is the preferred bath replenisher
- Designed specifically for dip (immersion) systems
- No post-rinse sealer is required

Components



Mix ratio (by volume):

DESOPREP™ 4000DM – 3% by volume DESOPREP™ Buffer - as required to adjust pH

Refer to DESOPREP™ 4000DM/DR Application Guide – Charge Instruction Section for details on bath make-up

Specifications



DESOPREP™ 4000DM/DR is qualified to the following:

 TT-C-490 CHEMICAL CONVERSION COATINGS AND PRETREATMENTS FOR METALLIC SUBSTRATES (BASE FOR ORGANIC COATINGS)

Note: PPG Aerospace recommends you check the most recent specification QPLs for updated information.

Surface preparation and pretreatments



Refer to application guidelines section of this document for further details.

Instructions for use



Mixing instructions:

Refer to application guidelines section of this document for further details.



Induction time:

Not required



Viscosity: (23°C/73°F)

Not applicable



Pot Life:

Not applicable

Application guidelines

Recommended application conditions:

Temperature: 15 - 46°C (60 - 114°F)

Application:

DP4000 Thin-Film pretreatment is designed to be used as part of a coating system stack-up (i.e. surface treatment + primer, or surface treatment + primer + topcoat).

Refer to DESOPREP™ 4000DM/DR Application Guide, separate document, contact your local Application Support Center for a copy.

These application guidelines represent PPG's best advice for usage in standard conditions. Some parameters will be influenced by environmental conditions, equipment settings, and other variables. Please contact your PPG Representative for the most up-to-date information.



Equipment:

Refer to DESOPREP $^{\text{TM}}$ 4000DM/DR Application Guide, separate document, contact your local Application Support Center for a copy.

Physical properties (product)



Color:

Clear



Gloss:

Not applicable



pH:

DP4000DM 1.2 – 1.8



pH:

DP4000DR 1.3 – 1.8



pH:

working solution

4.4 - 5.2



Refer to application guidelines section



VOC:

DESOPREP™ 4000DM/DR

0 grams/liter



Flash point closed cup:

DESOPREP™ 4000DM/DR

Not applicable

Shelf life:

12 months from date of manufacture to most OEM material specifications. Consult the specification to verify shelf life requirements.

Note: Shelf life is provided for original, unopened containers.

<u>Note:</u> The application and performance property values above are typical for the material, but not intended for use in specifications or for acceptance inspection criteria because of variations in testing methods, conditions and configurations.

Storage Recommendations



Inspect the condition of the container to ensure compliance. The material should be stored at temperatures between 10°C to 38°C (50°F to 100°F) to ensure shelf life. Note: When procuring to a qualified material specification, follow those storage instructions.

Health Precautions

This product is safe to use and apply when recommended precautions are followed. Before using this product, read and understand the Safety Data Sheet (SDS), which provides information on health, physical and environmental hazards, handling precautions and first aid recommendations. An SDS is available on request. Avoid overexposure. Obtain medical care in case of extreme overexposure.

For industrial use only. Keep away from children.

Additional information can be found at: www.ppgaerospace.com For sales and ordering information call the local PPG office at the numbers listed below:

Asia Pacific

ASC – Australia Tel 61 (3) 9335 1557 Fax 61 (3) 9335 3490

ASC – Japan Tel 81 561 35 5200 Fax 81 561 35 5201

ASC – South East Asia Tel 65 6861 1119 Fax 65 6861 6162

Europe and Middle East

ASC – Central Europe Tel 49 (40) 742 193 10 Fax 49 (40) 742 139 69

ASC – Middle East & India Tel (971) 4 883 9666 Fax (971) 4 883 9665

ASC - North Europe Tel 44 (0) 1388 770222 Fax 44 (0) 1388 770288

ASC – Suzhou Tel (86-512) 6661 5858 Fax (86-512) 6661 6868 **ASC – South Europe** Tel 33 (0) 235 53 43 71 Fax 33 (0) 235 53 54 44

ASC – Tianjin Tel (86-022) 2482 8625 Fax (86-022) 2482 8600

Americas

1 (818) 362-6711 or 1-800-AEROMIX

Desoclean, Desothane, and DeSoto are trademarks of PRC-DeSoto International, Inc.

All recommendations, statements, and technical data contained herein are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. User shall rely on his own information and tests to determine suitability of the product for the intended use and assumes all risks and liability resulting from his use of the product. Seller's and manufacturer's sole responsibility shall be to replace that portion of the product of this manufacturer which proves to be defective. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss, or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements other than those contained in a written agreement signed by an officer of the manufacturer shall not be binding upon the manufacturer or seller.

PRC-DeSoto International, Inc. 12780 San Fernando Road Sylmar, CA 91342

www.ppgaerospace.com

Issue Date: 4/20 Lit: 4743