

HERESHIELD AL SED 74

PRODUCT DESCRIPTION

Water-soluble finishing primer based on epoxy ester/melamine resin, oven cured. Excellent resistance to chemical attack conditions. It also provides electrical insulation.

RECOMMENDED USE

Recommended for application on automotive parts, machinery, and equipment.

PACKAGING

Single Component

20L Package containing 20L

CHARACTERISTICS

Color	Gray. Black.
Gloss	Matte (15 - 30 UB) HERESHIELD AL SED 744
VOC content	554.04 g/l
Volume Solids	44 ± 2% (ISO 3233)
Shelf Life	12 months
Dry Film Thickness	1.2 mils (30 µm) - 2.0 mils (50 µm)
Dry Heat Resistance	Maximum temperature 356 °F (180 °C). The product maintains its chemical properties up to a temperature of 356 °F (180 °C), but from 60°C, color and gloss variations in the paint may occur.
Theoretical Coverage	448.3 ft ² /ga (11,00 m ² /l) without dilution at a dry film thickness of 1.6 mils (40 µm). Loss factors during application are not considered.

DRYING

Oven Drying

	150 °C	170 °C
Flash off	20 min	12 min
Full drying	20 min	12 min

SURFACE PREPARATION

Standard Surface Preparation

The performance of this product is related to the degree of surface preparation. In case of doubts, for more information, consult WEG's Technical Department.

The surface must be clean, dry, and free of contaminants. Completely remove oils, greases, and fats according to SSPC-SP1.

Remove accumulated dirt using a dry brush, clean dry cloth, compressed air blow, vacuum, or a combination of these. Remove soluble salts by washing with plenty of fresh water, preferably under low pressure (up to 5,000 psi), according to SSPC-SP12/NACE No. 5 standard.

Degreasing

Completely remove oils and greases by applying a degreasing product or according to the solvent cleaning method. Whenever cleaning surfaces with cloths, replace them to avoid saturation. Do not use cotton waste or colored cloths.

Carbon Steel Surfaces

Hard surface layers (e.g., layers resulting from flame cutting) must be removed by grinding before starting abrasive blasting.

All welds must be inspected and, if necessary, repaired before completing abrasive blasting. Porosities, cavities, weld splatter, etc., must be repaired with proper mechanical treatment or welding repair. In other areas, round edges and sharp corners (r # 2 mm, ISO 8501-3).

Phosphated Surfaces

Carry out the coating conversion process by phosphating, using either zinc or tricationic phosphate,

with a mass between 2.0 g/m² and 4.0 g/m². Follow the sequential steps: degreasing; washing; pickling; washing; conditioner; phosphating; washing; passivation; deionized water rinse; drying.
NOTE: Surface preparation must be performed according to all sequential steps relevant to the phosphating process, following the recommendations of the pretreatment manufacturer.

APPLICATION PREPARATION

Mixing	Homogenize the content of the container using mechanical or pneumatic stirring. Ensure no sediment remains at the bottom of the container.
Thinner	WATER
Dilution	Depending on the application method, dilute to a maximum of 15%.
Notes	Water-based paints are naturally thixotropic, requiring caution during the dilution process. The amount of Diluent may vary depending on the type of equipment used and environmental conditions during application. Only add Diluent after complete mixing of the other components. Do not dilute with solvents not allowed by local legislation, and do not exceed the indicated dilution percentage. Excessive dilution may affect film formation, appearance, and make it difficult to achieve the specified thickness.

APPLICATION METHODS

Conventional Spray Gun	Spray gun: JGA 502 Devilbiss or equivalent Fluid nozzle: FX Air cap: 704 Atomization pressure: 50 - 70 psi Tank pressure: 10 - 20 psi.
Cleaning of the equipments:	WATER
Notes	The data presented serves as a guide and similar equipment may be used. Changes in pressures and nozzle sizes may be necessary to improve spraying characteristics. Purge the compressed air line to avoid paint contamination. Before application, ensure that the equipment and respective components are clean and in optimal condition. In spray application, overlap each gun pass by 50%, finishing with a cross pass. This technique avoids uncovered or unprotected areas and ensures proper aesthetic finish. Reinforce all sharp corners, gaps, and weld beads with a brush to avoid premature failures in these areas. Clean all equipment immediately after use. Do not leave material in hoses, guns, or equipment used for spraying. Thoroughly wash all used equipment. It is considered good practice to periodically wash the spraying equipment during the day. The cleaning frequency depends on the amount sprayed, temperature, and elapsed time, including all delays.

APPLICATION PERFORMANCE

Water-based paints are known for their low toxicity but are vulnerable to environmental contamination, especially by solvents other than water. For best performance, pH should be maintained between 5.5 and 6.5. Once the package is opened, it is recommended to use the product in its entirety.

For optimal application properties, the paint temperature should be between 21°C and 27°C before mixing and application.

Before application, observe weather conditions: there must be no threat of rain or drizzle. Surface temperature must be at least 3°C above the dew point, and relative humidity should not exceed 85%. Adverse conditions may cause color variations and other characteristics. Consult WEG Technical Department.

Painting is recommended only if surface temperature is at least 3°C above the dew point.



Substrate temperature, climatic and environmental conditions during application and curing, as well as applied film thickness, may affect drying time.

Paintings performed with varying application methods on the same project may result in differences in gloss and final appearance.

Small variations in color, appearance, and gloss (more noticeable in dark colors), as well as delayed curing and performance compromise, may occur during high humidity, rainy days, cold locations, or when parts dry outdoors.

Under adverse weather conditions in indoor and/or outdoor environments with high relative humidity, rain or drizzle, low or very low temperatures, and excessively high temperatures, variations in color and other product characteristics may occur. Please consult WEG's Technical Department for more information.

SAFETY PRECAUTIONS

Product developed for industrial use intended for handling by qualified professionals. Carefully read all information contained in the SDS of this product, available at: www.weg.net.

Store in a covered and well-ventilated place. Keep the container tightly closed and away from sources of heat or ignition.

Use only in well-ventilated areas, avoiding the accumulation of flammable vapors. Keep the product away from heat and sources of ignition.

Do not inhale mists/vapors/aerosols generated during handling and/or application. Use protective gloves/protective clothing/eye protection/face protection.

Empty containers and materials with paint residues must be disposed of according to current legislation. Take care of the environment.

NOTE

The information contained in this technical bulletin is based on the experience and knowledge acquired in the field by WEG's technical team.

In the event of using the product without prior consultation with WEG regarding its suitability for the purpose for which the customer intends to use it, the customer acknowledges that the use will be at their own exclusive responsibility, and WEG is not liable for the behavior, safety, suitability, or durability of the product.

Some information mentioned in this bulletin is only an estimate and may vary due to factors beyond the manufacturer's control. Therefore, WEG does not guarantee and assumes no responsibility for performance, efficiency, or any material or personal damages resulting from the incorrect use of the products in question or from the information contained in this Technical Bulletin.

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