

# **TEROSON WT 218 FR 200**

March 2018

#### **PRODUCT DESCRIPTION**

TEROSON WT 218 FR 200 provides the following product characteristics:

Technology	Aqueous Synthetic Resin Dispersion
Product Type	Underbody Coating
Application	Spraying and Spatula Application
Condition	Chip and Stone Protection with Flame Retardancy
Appearance	dark grey

TEROSON WT 218 FR 200 is an underbody coating compound based on an aqueous synthetic resin dispersion which is spray applied using airless equipment.

TEROSON WT 218 FR 200 demonstrates fire retardant properties.

It fulfills the HL 2 requirements in accordance to railway fire norm EN 45545-2.

Test report can be provided on request.

The sag resistance on vertical surfaces, when spray applied, is above 4 mm per one application layer.

The material can be dried at room temperature or subjected to accelerated drying at temperatures up to 70°C.

The drying time depends to large extent on the layer thickness, the room temperature and the ambient air humidity.

Good ventilation reduces the drying time.

During the drying process, no cracks occur even on large, flat coated surfaces.

The dry layer adheres to raw sheet metal, painted sheet metal based on an epoxy resin, aluminum and wooden underbodies; it demonstrates good road stone anti-chip behavior.

TEROSON WT 218 FR 200 can also be applied by hand, e.g. spatula.

However, we only recommend this application method for smaller areas or touch-up jobs.

#### **Application Areas:**

TEROSON WT 218 FR 200 is used primarily as a protective underbody coating by railway vehicle, caravan and mobile home manufactures. The material can also be used to provide sound insulation on HGV bodies.

TEROSON WT 218 FR 200 offers, due to its good abrasion resistant, excellent protection of the coated surface against mechanical damages. The material is used on coated surfaces (e.g. primer surfacer, etc.) in the underbody coating area. TEROSON WT 218 FR 200 is not qualified for corrosion protection on untreated/uncoated metal surfaces.

#### TECHNICAL DATA

#### TEROSON WT 218 FR 200

Colour:	dark grey
Odour:	of amine
Density:	approx. 1.53 g/cm <sup>3</sup>
Consistency:	viscous
Solids, %:	approx. 77 %
Consumption per 1 mm dry film:	approx. 1.77 kg/m <sup>2</sup>
Surface drying:	2 to 4 hrs.
Sag resistance:	4 mm wet
Application temperature, °C:	10 to 25
In service temperature range, °C:	-25 to 80
Completely dry:	20 to 48 hrs.
Short exposure (up to 1 h), °C:	100

#### Acoustic Data

Loss factor DIN EN ISO 6721-3:	≥0.05
Temperature, °C:	20
Frequency, Hz:	200
Material, steel sheet, mm:	1
Thickness ratio coating / steel sheet:	2:1

## Fire protection according to EN 45545-2 Spread of Flame:

Achieves hazard level HL3 for fire protection requirement sets R1, R7 and R17. Test Method: ISO 5658-2

#### Smoke toxicity & density:

Achieves hazard level HL3 for fire protection requirement sets R1, R7 and R17. Test Method: ISO 5659-2

#### Heat release rate:

Achieves hazard level HL2 for fire protection requirement sets R1, R7 and R17. Test Method: ISO 5660-1



#### DIRECTIONS FOR USE

#### **Preliminary Statement:**

Prior to application it is necessary to read the **Material Safety Data Sheet** for information about precautionary measures and safety recommendations. Also, for chemical products exempt from compulsory labeling, the relevant precautions should always be observed.

#### **Pre-Treatment:**

Since aqueous dispersions such as TEROSON WT 218 FR 200 do not adhere to oil substrates with a wax content, appropriate pretreatment is necessary in such cases. This can be achieved by cleaning using high-pressure washing systems at 80°C with the addition of a cold cleaner. Please follow any instructions provided by the material or equipment manufacturer. Solvents, such as acetone, can also be used for cleaning.

#### Application:

TEROSON WT 218 FR 200 can be sprayed in an airless spraying process at 80 to 100 bar. A wet layer thickness of up to 4 mm can be applied in one operation. All spraying equipment should be made from stainless steel, including the pump, to eliminate the possibility of aqueous base corroding (rusting) the equipment.

#### Drying:

TEROSON WT 218 FR 200 undergoes a purely physical drying process due to evaporation of the water. This can take place at room temperature, or drying can be accelerated by temperatures up to 70°C. Bubble formation may occur at higher temperatures. Good ventilation should facilitate removal of the evaporating water from the coating. Where the air humidity is high, drying can be retarded severely or may cease altogether (if air humidity is close to 100%). In such cases only hot drying is possible.

#### Painting:

The completely dried layer can be painted. Due to the large number of paint systems on the market available, preliminary tests are recommended.

#### Cleaning:

All equipment or contaminated components should be cleaned with water immediately after applying TEROSON WT 218 FR 200. After drying, TEROSON WT 218 FR 200 can only be removed mechanically. If spray guns are not cleaned immediately, they should be stored under exclusion of air, e.g. directly in water.

#### **Classification:**

Please refer to the corresponding **Safety Data Sheets** for details on: **Hazards identification Transport information Regulatory information** 

#### Storage:

Recommended storage temperature, °C	10 to 25
Shelf-life (in unopened original packaging)	12 months
Frost-Sensitive	Yes

#### ADDITIONAL INFORMATION Disclaimer

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