



# MATERIAL SAFETY DATA SHEET POLYESTER POWDER COATINGS

Edition: 4

Date: 22/11/2022

## PERFORMANCE COATINGS

### 1. CHEMICAL COMPOUND IDENTIFICATION DATA AND COMPANY DETAILS:

**PRODUCT COMMERCIAL NAME:** Polyester Powder

Recommended use: Electrostatic powder coating of metallic surfaces, for professional use only in dedicated powder coating plants.

Supplier: AVACE Ltd, 19A Navigation Drive, Hurst Business Park, Brierley Hill, DY5 1UT.  
Telephone (+44) 01384 400355 Fax (+44) 01384 400340

Country of Origin: Manufactured in the United Kingdom.

Commodity Code: 39079190

Advisory Body: British Coatings Federation +44 1372 360660

### 2. HAZARDS IDENTIFICATION:

Product definition: Mixture

Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)

**Physical Hazards** Not Classified  
**Health Hazards** Not Classified  
**Environmental Hazards** Not Classified

**2.2 Label Elements according to Regulation EC No 1272/2008** None

Other Hazards May form an explosive dust-air mixture if dispersed.

### 3. COMPOSITION / INGREDIENTS INFORMATION:

**CHEMICAL COMPOSITION:** This product is a mixture. Health Hazard information is based on its components.

**Chemical characterisation** Mixture of synthetic resins and pigments  
**Hazardous Components.** Substances presenting a health or environmental hazard within the meaning of Directive 67/548/EEC

Substance Name	Concentration Range	Classification	CAS No
Coating powder inhalable	95-<100%	Non Hazardous	Not available
Coating powder respirable	7-<10%	Non Hazardous	Not available

#### Substances presenting a health or environmental hazard within the meaning of Regulation EC No 1272/2008

The product contains no substances classified as hazardous to health in concentrations which should be taken into account. Up to the given revision date of this MSDS no Reach registration numbers are assigned to the chemical substances used in this preparation.

### 4. FIRST AID MEASURES:

#### GENERAL:

When in doubt or if symptoms persist seek immediate medical attention. Show this MSDS to the medical personnel. If the patient is unconscious do not administer anything orally. Keep the Compound's Safety Card close at hand.

#### INHALATION:

Bring the patient to a well-ventilated area and keep warm and comfortable. Maintain an open airway. Loosen tight clothing such as a collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. If the patient's respiration is irregular or it stops, resort to mouth-to-mouth resuscitation. If the patient is unconscious place him/her into the recovery position, ensure breathing can take place and seek medical attention.

#### SKIN CONTACT:

Brush off loose particles from the skin. Remove immediately the contaminated clothes. Wash the affected area thoroughly with soap and water or specific detergent. Do not use solvents or diluents.

#### EYE CONTACT:



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## INGESTION:

Rinse mouth thoroughly with water. Give a few small glasses of water to drink. In case of accidental ingestion immediately seek medical attention. Bring the patient to a well-ventilated area and keep warm and comfortable. Maintain an open airway. If the patient is unconscious place him/her into the recovery position, ensure breathing can take place and seek medical attention. Do not induce vomiting.

**Protection of First Aiders** First aid personnel should wear appropriate protective equipment during any rescue.

## 4.2 Most important symptoms and effects, both acute and delayed

<b>General</b>	See section 11 for additional information on health hazards. The severity of the symptoms described will vary dependent on the concentration and length of the exposure.
<b>Inhalation</b>	Dust may irritate the respiratory system.
<b>Ingestion</b>	May cause discomfort if swallowed. May cause stomach pain.
<b>Skin Contact</b>	Prolonged contact may cause dryness of the skin
<b>Eye Contact</b>	Dust may cause slight irritation

## 4.3 Indication of any immediate medical attention and special treatment needed

<b>Notes for the Doctor</b>	Treat symptomatically
<b>Specific treatments</b>	No special treatment required

## 5. FIRE FIGHTING MEASURES:

### EXTINGUISHING MEDIA:

**Recommended:** The product is not flammable. Extinguish with Alcohol-resistant foam, CO<sub>2</sub> blanket, dry powder, fine water spray. Use fire-extinguishing media suitable for the surrounding fire

**DO NOT USE:** Water Jet or high pressure inert gas as an extinguisher as this will spread the fire

### Special Hazards arising from the mixture:

**Specific hazards** Avoid generation and spreading of dust. Fire will produce dense black smoke containing hazardous combustion products. Exposure to decomposition products may cause a health hazard. Appropriate breathing apparatus may be required.

**Hazardous combustion products** Thermal decomposition or combustion products may include the following substances  
Harmful gases or vapours such as carbon monoxide, oxides of nitrogen and smoke

### Advise for Firefighters:

Avoid breathing fire gases or vapours. Evacuate the area. Cool containers exposed to heat with water spray and remove from the fire area if it can be done without risk. Control run off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities. If needed use a recommended breathing apparatus (SCBA) and appropriate protective clothing. Firefighters clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

## 6. ACCIDENTAL RELEASE MEASURES:

### 6.1 Personal precautions, protective equipment and emergency procedures

No action shall be taken without appropriate training or involving any personnel risk. Keep unnecessary and unprotected personnel away from spillage. Wear protective clothing as described in section 8. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage. Ensure procedures and training for emergency decontamination and disposal are in place. Do not touch or walk into spilled material.

### 6.2 Environmental precautions

Do not allow to enter drains or watercourses. Large spillages, inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air)

### 6.3 Methods and material for containment and cleaning up

If using a shovel or broom be careful not to create dust clouds. If necessary dampen with water prior to clean up. Wear protective clothing as described in section 8 of this safety data sheet. Ventilate the area and remove all sources of naked flame or sparks. Avoid inhaling the powder. Released material should be collected with a vacuum cleaner or wet brooms, placed into a proper container to be disposed of according to current regulations. Containers with collected spillage must be labelled correctly with hazard symbol. Dispose of waste to licensed waste disposal site in accordance with local authority requirements. Flush contaminated area with plenty of water. Wash thoroughly after dealing with spillage. Avoid the compound entering drains or waterways. Should the product contaminate sewers, rivers or lakes promptly inform the responsible authority according to local regulations (firemen, public safety authorities, civil protection authorities etc.) See section 11 for additional information on health hazards. See section 12 for additional information on ecological hazards. For waste disposal see section 13



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## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling and occupational hygiene

Read and follow the manufacturers recommendations. Precautions should be taken to prevent the formation of dust clouds in concentrations above flammable, explosive or occupational exposure limits. The mixture may charge electrostatically always use earthing leads when transferring from one container to another. Persons suffering from respiratory problems or prone to allergic reactions should not handle or be exposed to powder coatings. Avoid contact with skin and eyes. Do not smoke, eat or drink in the proximity of the compound. Refer to point 8 for instructions regarding personal protection devices. Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse. Wash at the end of each work shift before drinking and eating.

### HANDLING

It is necessary to avoid professional exposure limits and a concentration of powder that exceeds the flash point (flammable and explosive). Avoid the compound coming into contact with hot surfaces, sparks or other sources of naked flame. All electrical appliances must be protected in accordance with the correct safety regulations and standards. During pouring operations always ensure proper grounding to prevent electro static charge of the compound. Workers must wear antistatic footwear and conductive clothing. Floors must also be conductive. The compound must be stored in the original containers or into containers of the same type as the original container and kept sealed and away from heat, sparks or naked flames. Tools employed must be anti-spark.

### STORAGE:

The principles contained in the HSE guidance note Storage of Packaged Dangerous Substances should be observed when storing this product. Store away from incompatible materials (see section 10) Adhere to all instructions found on the label. Store in a dry and well ventilated place, at a temperature between 5c and 25°C, away from direct sun, heat sources and spark and naked flames. Access to storage area must be restricted to authorized personnel only. Partially used containers should be closed carefully and stored upright to prevent any product leakage. Pallets of the compound must not be stacked on top of each other. Bund storage facilities to prevent soil and water pollution in the event of spillage.

## 8. EXPOSURE CONTROL/PERSONAL PROTECTION:

### GENERAL PRECAUTIONS.

Adequately ventilate the work environment and avoid inhalation of powders. In order to optimise air change and circulation install, where possible, ventilators close to the source. However, if powder concentrations remain over exposure limits, adequate respiratory protection systems must be worn.

**DNEL** No information available

**PNEC** No information available

**Community/National occupational exposure limits** The product contains no substances classified as hazardous to health by an OEL value in concentrations which should be taken into account.

### Occupational exposure limits Genetic dust WEL:

	Long term exposure limit (8hr TWA) mg/m <sup>3</sup>
Inhalable Dust (Nuisance dust)	10
Respirable dust (Nuisance dust)	4

### Appropriate engineering controls

Provide adequate ventilation. Good general ventilation should be adequate to control worker exposure to airbourne contaminants. .

Personal protective equipment should only be used if worker exposure cannot be controlled adequately by the engineering control measures.

Ensure operatives are trained to minimise exposure.

### PERSONAL PROTECTION:

#### Respiratory system protection:

Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible.

Protection against nuisance dust must be used when the air borne concentration exceeds 10mg/m3. Wear a suitable dust mask. Ensure all respiratory protective equipment is suitable for its intended use and is CE-marked. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with European Standard EN14387. Full facemask respirators with replaceable filter cartridges should comply with European Standard EN136. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140. When spraying, wear a suitable supplied air respirator.

#### Hand protection:

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with European Standard EN374. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.



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### Other Skin and Body protection:

Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible. Wear protective clothes and antistatic footwear. Wash thoroughly any part of the body which came in contact with the compound. Careful attention must be paid to the choice of workers' protective clothing to avoid possible skin inflammation and irritation of the neck and wrists areas due to the contact with the compound.

### Eye protection:

Wear safety goggles complying with an approved standard if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with European Standard EN166. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Wear tight fitting, dust resistant, chemical splash goggles if air borne dust is generated.

### Hygiene measures:

Provide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating. When using do not eat or drink. Preventive industrial medical examinations should be carried out. Warn cleaning personnel of any hazardous properties of the product.

### Environmental exposure controls:

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

## 9. CHEMICAL AND PHYSICAL PROPERTIES

Aspect:	Fine powder	
Colour:	Various colours	
Odour:	Slight	
Specific density:	from 1.2 to 1.9	(g/cm <sup>3</sup> )
Flash Point:	Not Applicable	
Min explosive concentration (LEL)	20-70	(g/m <sup>3</sup> )
Water solubility:	Insoluble	(g/l)
Softening temperature:	>50	(°C)
Auto ignition temp	400c	
Decomposition temp	>230c	
Minimum ignition energy:	5-60	(Mj)

## 10. STABILITY AND REACTIVITY:

The product can be considered stable when handling and storage conditions are as prescribed in point 7. Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include harmful gases or vapours. No specific material or group of materials is likely to react with the product to produce a hazardous situation. No potential hazardous reactions known. Earth container and transfer equipment to eliminate sparks from static electricity.

## 11. TOXICOLOGICAL INFORMATION:

Acute toxicity-oral (oral LD <sub>50</sub> )	Based on available data the classification criteria are not met
Acute toxicity-dermal (dermal LD <sub>50</sub> )	Based on available data the classification criteria are not met
Acute toxicity-inhalation (inhalation LC <sub>50</sub> )	Based on available data the classification criteria are not met
Skin corrosion/irritation	Based on available data the classification criteria are not met
Serious eye damage/irritation	Based on available data the classification criteria are not met
Respiratory sensitisation	Based on available data the classification criteria are not met
Skin sensitisation	Based on available data the classification criteria are not met
Genotoxicity-in vitro	Based on available data the classification criteria are not met
Carcinogenicity	Based on available data the classification criteria are not met
Reproductive toxicity-fertility	Based on available data the classification criteria are not met
Reproductive toxicity-development	Based on available data the classification criteria are not met
Specific target organ toxicity-single exposure	Not classified as a specific target organ toxicant after a single exposure
Specific target organ toxicity-repeated exposure	Not classified as a specific target organ toxicant after repeated exposure
Aspiration hazard	Not relevant. Solid
General information	Dust may irritate the eyes and the respiratory system. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Dust may irritate the respiratory system. Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases
Ingestion	May cause discomfort if swallowed. May cause stomach pain or vomiting
Skin contact	Prolonged contact may cause dryness of the skin
Eye contact	Dust may cause slight irritation



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Route of entry  
Target organs

Ingestion inhalation skin and/or eye contact  
No specific target organs known

## 12. ECOLOGICAL INFORMATION:

Not regarded as dangerous for the environment. However large or frequent spills may have hazardous effects on the environment. Specific information on the compound is not available. The compound and its residuals must not be discharged into drains or waterways nor be deposited where ground or waterways contamination could occur due to accidental release. The product does not contain any substances classified as PBT or vPvB. No other adverse affects.

## 13. DISPOSAL CONSIDERATIONS:

The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions residues and by products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous. Do not empty into drains. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste residues empty containers discarded work clothes and contaminated cleaning materials should be collected in designated containers. Labelled with their contents. Waste packaging should be collected for reuse or recycling. Incineration or landfill should only be considered when recycling is not feasible. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities. Information given is applicable to the product as supplied. Waste coating powders (08 02 01). Composite Packaging (15 01 15). Directive 2008/98/EC of the European Parliament and of the Council of 19.11.08 on waste and repealing certain Directives.

## 14. TRANSPORT INFORMATION:

The product is not covered by international regulations on the transport of dangerous goods (IMDG,IATA,ADR/RID)

### ROAD AND RAIL TRANSPORT

GGVE/GGVS: not applicable  
RID/ADR not applicable

### SEA TRANSPORT

IMDG CODE: not applicable  
UN-No/GGV-See: not applicable

### AIR TRANSPORT

ICAO/IATA-DGR not applicable

### RIVER TRANSPORT

GGVE/GGVS: not applicable  
RID/ADR: not applicable

**In general, no restriction is applied to the transport of powder coatings.**

## 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the mixture.  
Not dangerous in accordance with Directive 1999/45/EC. Restricted to professional users.  
EU Regulation (EC) No 1907/2006 (REACH)  
Annex XIV List of substances subject to authorisation Substances of very high concern  
None of the components are listed  
Commission Regulation (EU) No 2015/830 of 28.05.15  
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16

## 16. OTHER INFORMATION

Information as supplied in this safety report is supplied in good faith and to the best of our current knowledge. This information is not to be considered as a guarantee of the compound properties, but rather a description of this product characteristic and purely to aid safety issues. Avace Ltd does not assume any responsibility for improper use or purposes other than those indicated in point 1 unless prior written instruction has been obtained. The obligation to comply with hygiene, safety and environmental protection rules prescribed by current laws remains always under the end users' responsibility.