

**Updated: August 2019**

## **MSDS 5 - Powder Coating - Health and Safety Datasheet**

### **1. IDENTIFICATION OF SUBSTANCE**

Product Name	Thermoset Powder Coating.
Product Description	A Polyester based Thermoset Powder Coating.
Supplier	As heading

### **2.1 CLASSIFICATION OF THE SUBSTANCES OR MIXTURE**

EC 1272/2008	
Physical and Chemical Hazards	None
Human health	Acute Tox. 4 - H302
Environment	Aquatic Chronic 2 - H411

The Full Text for all Hazard Statements are Displayed in Section 16.

#### *Human health*

This product may be harmful if swallowed.

#### *Physical and Chemical Hazards*

Small particulate size may present a dust hazard. Wear protective clothing when in use (see section 8).

### **2.2 LABEL ELEMENTS**

Contains Pyromellitic acid diphenylimidazoline salt

Labels in Accordance with EC 1272/2008



Signal Word Warning

#### *Hazard Statements*

H302	Harmful if swallowed.
H411	Toxic to aquatic life with long lasting effects.

#### *Precautionary Statements*

P260	Do not breath dust
P264	Wash exposed skin thoroughly after handling
P270	Do no eat, drink or smoke when using this product
P280	Wear protective clothing
P284	Wear respiratory protection
P301+P310+P331	IF SWALLOWED: Immediately call a doctor. Do NOT induce vomiting.
P391	Collect spillage.

### **3. COMPOSITION / INFORMATION ON INGREDIENTS**

Hazardous Ingredient	EC/List No.	CAS No.	%	GHS Symbols	1272/2008	Signal
Pyromellitic acid diphenylimidazoline salt	259-226-5	54553-91-2	<25%	07, 09	H302, H411	Warning

#### **Additional Information**

The Full Text for all Hazard Statements are Displayed in Section 16. All Concentration values are expressed in a weight/weight % value.

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### 4. FIRST AID MEASURES

General	- If medical attention is required present a copy of this datasheet to the physician. Remove all contaminated clothing. The person must rest and be kept under medical observation even if there are no immediate signs of symptoms. Symptoms of intoxication may not appear for several hours. Define a first aid plan of action prior to commencing work with this product. Consult the occupational physician.
Inhalation	- Remove to fresh air, keep patient warm and at rest. If breathing is irregular or has stopped, administer artificial respiration. Give nothing by mouth. If unconscious place in recovery position and seek medical advice.
Skin Contact	- Remove contaminated clothing. Wash skin thoroughly with soap and water or use a proprietary skin cleanser. Do <b>not</b> use solvents or thinners.
Eye Contact	- Remove contact lenses. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart, and seek medical advice.
Ingestion	- If accidentally swallowed wash out mouth with water, provided person is conscious. Get medical attention immediately. Keep at rest. <b>Do not induce vomiting.</b>

*Seek medical attention*

#### Common Symptoms and effects both acute and delayed

##### Common Symptoms and effects both acute and delayed

Inhalation	- None. Exposure to products of thermal decomposition may present a hazard.
Ingestion	- Sickness, loss of appetite, low blood pressure, kidney / liver damage.
Skin Contact	- No acute symptoms, prolonged exposure may lead to irritation if allergic.
Eye Contact	- May cause irritation.

### 5. FIRE FIGHTING MEASURES

Fire Hazards	- Fire will produce a dense black smoke containing hazardous decomposition products (see Section 10). Exposure to decomposition products may present a health hazard. Appropriate self contained breathing apparatus may be required.
Extinguishing Media	- Alcohol Resistant Foam, Carbon Dioxide, Dry Chemicals or Water Spray. Do not use water in a jet.
Combustion Products	- During fire, CO, CO <sub>2</sub> and oxides of Nitrogen are formed.
Protective Equipment	- Self contained breathing apparatus and full protective clothing must be worn in case of fire.
Environmental	- Keep run off water out of sewers and water sources. Dike for water control.
Procedures	- Cool sealed containers exposed to flames with water until well after the fire is out. Use water spray to reduce vapours. If risk of water pollution occurs, notify appropriate authorities.

### 6. ACCIDENTAL RELEASE MEASURES

Personal	- Avoid breathing dust.
Environmental	- Do not allow to enter into surface water or sewer system. Spillages or uncontrolled discharges into watercourses must be <b>immediately</b> alerted to the Environmental Agency or other appropriate regulatory body.
Methods of Clean Up	- Ventilate well. Remove ignition sources. Collect spillages with an electrically protected vacuum cleaner or by wet brushing and place in a closed container for disposal in accordance with local regulations. Do not use a dry brush as dust clouds or static may be created.

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### 7. HANDLING AND STORAGE

Persons with a history of respiratory problems or allergic responses should only be exposed to, or handle, this product under appropriate medical supervision.

#### HANDLING

Precautions should be taken to prevent the formation of dusts in concentrations above flammable, explosive or occupational Exposure Limit Values. Electrical equipment and lighting should be protected to appropriate standards and to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Exclude sources of heat, sparks and open flame. Avoid the inhalation of dusts. Smoking, eating and drinking should be prohibited in areas of storage and use. For Occupational Exposure Controls see Section 8. Always keep in containers made of the same material as the supply container. Good housekeeping standards and regular safe removal of waste materials will minimise the risks of spontaneous combustion and other fire hazards. The product may charge electrostatically. Use earthing leads when transferring from one container to another. Operators should wear anti-static footwear and clothing and floors should be electrically conductive. The Manual Handling Operations Regulations may apply to the handling of containers of this product. Refer to the guide weight indicated on the container when carrying out assessments.

#### STORAGE

Observe the label precautions. Store between 5 and 25°C in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorised access. Containers that are opened should be properly resealed and kept upright to prevent leakage. The principles contained in the HSE guidance note Storage of Packaged Dangerous Substances should be observed when storing this product.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Adequate ventilation should be provided such that Derived No Effect Limits are not exceeded. Local Exhaust Ventilation is preferable to personal protection. Gloves made out of latex at least 0.5mm thick, goggles, protective overalls should also be worn. In cases of insufficient ventilation, a chemical respirator should be worn.

Provide eyewash station and safety shower. Wear appropriate clothing to prevent repeated or prolonged skin contact.

DNELs and PNECs provided are for substances at full concentration and not as present in MSDS 5 powders.

#### DNEL

Ingredient	Workers (Systemic)						General (Systemic)					
	Inhalation		Dermal		Oral		Inhalation		Dermal		Oral	
	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic
Pyromellitic acid diphenylimidazoline salt	-	0.173	-	0.196	-	-	-	0.043	-	0.098	-	0.098

Chronic = Long Term Exposure  
Inhalation (mg / m<sup>3</sup> /day)

Oral (mg/kg bw/day)

Information provided by echa  
Dermal (mg/kg bw/day)

#### PNEC

Ingredient	Freshwater	Marine Water	Intermittent Release	STP	Sediment Freshwater	Sediment Marine Water	Soil
Pyromellitic acid diphenylimidazoline salt	0.0023 mg/l	0.00023 mg/l	0.023 mg/l	27 mg/l	3.012 mg/kg	0.3012 mg/kg	10 mg/kg

#### Hygiene Measures

Wash hands at the end of each work shift and before eating, smoking and using the toilet. Remove any clothing that becomes contaminated. Contaminated clothing should be placed in a closed container until disposal or decontamination. Warn cleaning personnel of contaminants hazardous properties.

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### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Fine Powder	<b>Specific Gravity</b>	1.2 to 1.9 g/cm <sup>3</sup>
<b>Odour</b>	Odourless	<b>Min Ignition Temperature</b>	400°C
<b>Oxidising</b>	N/A	<b>VOC</b>	No Data Available
<b>Solubility (in water)</b>	insoluble	<b>Min explosive concentration</b>	20 - 70g/m <sup>3</sup>

### 10. STABILITY AND REACTIVITY

Conditions to Avoid	- None
Materials to Avoid	- None
Hazardous decomp products	- Does not decompose under normal conditions. during fire CO, CO <sub>2</sub> and oxides of nitrogen may be formed.

### 11. TOXICOLOGICAL INFORMATION

General	- Harmful if swallowed.
Skin Contact	- Prolonged or repeated contact may cause irritation which may lead to dermatitis or skin cracking.
Eye Contact	- May cause irritation to eyes.
Inhalation	- May cause irritation to the respiratory tract and coughing.
Ingestion	- May cause nausea and vomiting. Ingesting large quantities may lead to kidney failure.

#### Toxicological information on ingredients

	<b>Pyromellitic acid diphenylimidazoline salt</b>
<b>Acute Toxicity (Oral LD50)</b>	980 mg/kg (Rat)
<b>Acute Toxicity (Dermal LD50)</b>	-
<b>Acute Toxicity (Inhalation LC50)</b>	-

### 12. ECOLOGICAL INFORMATION

MSDS 5 powders are not classified as hazardous to the environment, but may be toxic to the aquatic environment.

#### Ecological information on ingredients (Acute Toxicity)

<b>Ingredient / Subject</b>	<b>Species</b>	<b>Medium</b>	<b>Period</b>	<b>Test</b>	<b>Result</b>
<b>Pyromellitic acid diphenylimidazoline salt</b>					
fish	Brachydanio rerio	fresh water	96h	LC50	> 100 mg/l
invertebrates	Daphnia magna	fresh water	48h	EC50	37 mg/l
algae	Desmodesmus subspicatus	fresh water	72h	EC50	2.3 mg/l
microorganisms	Pseudomonas putida	fresh water	17h	EC50	360mg/l

#### Persistence and degradability

There is no data on the degradability of this product.

#### Bioaccumulative potential

There are no data on the bioaccumulation of this product.

#### Mobility in soil

There are no data on the Mobility in soil of this product.

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### **PBT and vPvB assessment**

This product does not contain any PBT or vPvB substances.

### **13. DISPOSAL CONSIDERATIONS**

Chemical Waste. Contact specialist disposal companies. Dispose of waste and residues in accordance with local authority requirements. Absorb in vermiculite or dry sand and dispose of at a licenced hazardous waste collection point. Contact waste disposal services.

### **14. TRANSPORT INFORMATION**

PCS Powders labelled MSDS 2 are not regulated for transport.

### **15. REGULATORY INFORMATION**

#### *Statutory Instruments*

Control of Substances Hazardous to Health.

#### *Approved Code Of Practice*

Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply.

#### *Guidance Notes*

Workplace Exposure Limits EH40.

#### *EU Legislation*

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18<sup>th</sup> December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16<sup>th</sup> December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

#### *National Regulations*

Control of Substances Hazardous to Health Regulations 2002 (as amended) The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 ("CDG 2009"), SI 2009 No 1348.

### **16. OTHER INFORMATION**

#### **Abbreviations:**

**N/A** not applicable. **ND** not determined. **NR** not regulated.

**ADR:** European agreement concerning the international carriage of Dangerous goods by road.

**CAS** International reference numbers for chemical substances. (Chemical Abstracts Service)

**CHIP:** Chemicals (Hazard Information and Packaging) Regulations 1993, and later revisions.

**DNEL:** Derived No-Effect Level.

**EINECS:** European Inventory of Existing commercial Chemical Substances.

**GHS:** Globally Harmonized System of Classification and Labelling of Chemicals.

**HSE EH40:** H.S.E. Guidance note EH40 on Occupational Exposure Limits (revised annually), to be used in conjunction with the COSHH regulations.

**IMDG:** International Maritime code for Dangerous Goods.

**LC50:** Lethal Concentration, 50 percent.

**LD50:** Lethal Dose, 50 percent.

**EC50:** Concentration of toxant that provides a response that is half way between a baseline and maximum effect.

**PBT:** Persistent Bioaccumulative Toxic.

**PNEC:** Predicted No-Effect Concentration.

**RID:** Regulation Concerning the International Transport of Dangerous Goods by Rail.



**STEL:** Short Term Exposure Limit.

**TWA:** Time Weighted Average.

**vPvB:** Very Persistent and Very Bioaccumulative.

**WEL:** Workplace Exposure Limit.

**Example Label using information from Section 2.2**

**WARNING**

## Thermoset Powder Coating

Contains: Pyromellitic acid diphenylimidazoline salt

Harmful if swallowed.  
 Toxic to aquatic life with long lasting effects.  
 Do not breath dust  
 Wash exposed skin thoroughly after handling  
 Do no eat, drink or smoke when using this product  
 Wear protective clothing  
 Wear respiratory protection  
 IF Swallowed: Immediately call a doctor. Do NOT induce vomiting.  
 Collect spillage.

**Batch Number: 0123456**

**25 kg**

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**Hazard Statements in Full**

H302	Harmful if swallowed.
H411	Toxic to aquatic life with long lasting effects.

**Note:** This data sheet does not constitute a user's assessment of workplace risk as required by the Health & Safety At Work Act, COSHH, Management of Health and Safety at Work Regulations or other health and safety legislation

The data contained in this safety data sheet has been supplied as required by the Chemicals (Hazard identification and Packaging for supply) Regulations, as amended, for the purpose of protecting the health and safety of industrial users who are deemed capable of understanding and acting upon the information provided. Every endeavour has been made to ensure that the information in this document is reliable, but no responsibility can be taken for errors or omissions. Users must satisfy themselves that there are no circumstances requiring additional information or precautions or the verification of details given herein.