

**Spectrum UltraLine L220 MMA Paint**  
**[Part.1 – Base | Part.2 – Catalyst]**



## SAFETY DATA SHEET – Part.1

According to Regulation (EC) No 1907/2006, Annex II, as amended by Regulation (EU) 2015/830

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

<b>Product Name</b>	<b>Spectrum UltraLine L220 MMA Paint</b>
<b>Product Inclusion</b>	Part.1 of this document covers all colour variants in the Spectrum UltraLine L220 MMA Based Paint range – Base only.
<b>Container Size</b>	8kg

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

<b>Identified Uses</b>	Base for road coating based on methacrylate resins paints and varnishes. For professional user/industrial user only.
<b>Uses advised against</b>	All uses not specified in this section or in section 7.3.

#### 1.3. Details of the supplier of the safety data sheet

<b>Supplier</b>	Meon Ltd. Railside Northharbour Spur Portsmouth PO6 3TU +44 (0) 23 9220 0606 mail@meonuk.com
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#### 1.4. Emergency Telephone Number

<b>Emergency telephone</b>	+44 (0) 808 118 1922
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### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### **CLP Regulation (EC) no. 1272/2008**

<b>Classification of this product has been carried out in accordance with CLP Regulation (EC) no. 1272/2008</b>	Flam. Liq. 2: Flammable liquids, Category 2, H225 Skin Irrit. 2: Skin irritation, Category 2, H315 Skin Sens. 1: Sensitisation, skin, Category 1, H317
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#### 2.2. Label Elements

##### **CLP Regulation (EC) no. 1272/2008**

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Hazard pictogram(s)



Signal word

Danger

Hazard statement(s)

H225 - Highly flammable liquid and vapour

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

Precautionary statement(s)

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P260 - Do not breathe vapours

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P370+P378 - In case of fire: Use ABC powder extinguisher to extinguish

P403+P233 - Store in a well-ventilated place. Keep container tightly closed

P501 - Dispose of contents/container in accordance with regulations on hazardous waste or packaging and packaging waste respectively

Supplementary information

EUH 208 - Contains Methacrylic acid, monoester with propane-1,2-diol. May produce an allergic reaction

Substances that contribute to the classification

Methyl methacrylate; n-butyl acrylate; 2,2'-ethylenedioxydiethyl dimethacrylate

### 2.3. Other hazards

Other hazards

Product fails to meet PBT/vPvB criteria.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Substance

Non-applicable




### 3.2. Mixtures

Chemical description

Mixture composed of additives, pigments and resins


### Components

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification		Concentration
CAS: 14808-60-7 EC: 238-878-4 Index: Non-applicable REACH Non-applicable	<b>Quartz (1 % &lt; RCS &lt; 10%)<sup>(1)</sup></b>		Self-classified  1 - <10 %
	Regulation1272/2008	STOT RE 2: H373 - Warning 	
CAS: 80-62-6 EC: 201-297-1 Index: 607-035-00-6 REACH 01-2119452498-28-XXXX	<b>Methyl methacrylate<sup>(1)</sup></b>		ATP CLP00  1 - <10 %
	Regulation1272/2008	Flam. Liq. 2: H225; Skin Irrit. 2: H315; Skin Sens. 1: H317; STOT SE 3: H335 - Danger 	
CAS: 141-32-2 EC: 205-480-7 Index: 607-062-00-3 REACH 01-2119453155-43-XXXX	<b>n-butyl acrylate<sup>(1)</sup></b>		ATP CLP00  1 - <10 %
	Regulation1272/2008	Eye Irrit. 2: H319; Flam. Liq. 3: H226; Skin Irrit. 2: H315; Skin Sens. 1: H317; STOT SE 3: H335 - Warning 	
CAS: 109-16-0	<b>2,2'-ethylenedioxydiethyl dimethacrylate<sup>(1)</sup></b>		Self-classified  1 - <2.5 %

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EC: 203-652-6 Index: Non-applicable REACH 01-2119969287-21-XXXX	Regulation1272/2008	Skin Sens. 1: H317 - Warning		
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<sup>(1)</sup> Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2015/830  
To obtain more information on the risk of the substances consult sections 11, 12 and 16.

### SECTION 4: First aid measures

As a general rule, in case of doubt or if symptoms persist, always call a doctor. NEVER induce swallowing by an unconscious person.

#### 4.1. Description of first aid measures

<b>General information</b>	The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.
<b>Inhalation</b>	This product is not classified as hazardous through inhalation. However, in case of intoxication symptoms it is recommended to remove the person affected from the area of exposure, provide clean air and keep at rest. Request medical attention if symptoms persist.
<b>Ingestion/Aspiration</b>	Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.
<b>Skin contact</b>	Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.
<b>Eye contact</b>	Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, as this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

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

Acute and delayed effects are indicated in sections 2 and 11.

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

Non-applicable.

### SECTION 5: Firefighting measures

Flammable. Chemical powders, carbon dioxide and other extinguishing gas are suitable for small fires.

#### 5.1. Extinguishing media

<b>Suitable extinguishing media</b>	If possible, use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	IT IS RECOMMENDED NOT to use full jet water as an extinguishing agent.

#### 5.2. Special hazards arising from the substance or mixture

<b>Specific hazards</b>	As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.
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#### 5.3. Advice for firefighters

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<b>Advice or firefighters</b>	Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit) in accordance with Directive 89/654/EC.
<b>Additional provisions</b>	Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

### SECTION 6: Accidental release measures

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

<b>Personal precautions</b>	Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Destroy any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.
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#### **6.2. Environmental precautions**

<b>Environmental precautions</b>	This product is not classified as hazardous to the environment. Keep product away from drains, surface and underground water.
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#### **6.3. Methods and material for containment and cleaning up**

<b>Methods for cleaning up</b>	It is recommended: Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.
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#### **6.4. Reference to other sections**

<b>Reference to other sections</b>	See sections 8 and 13.
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### SECTION 7: Handling and storage

Requirements relating to storage premises apply to all facilities where the mixture is handled.

#### **7.1. Precautions on safe handling**

<b>Precautions for safe manipulation</b>	Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.
<b>Technical recommendations for the prevention of fires and explosions</b>	Transfer in well ventilated areas, preferably through localized extraction. Fully control sources of ignition (mobile phones, sparks,...) and ventilate during cleaning operations. Avoid the existence of dangerous atmospheres inside containers, applying inertization systems where possible. Transfer at a slow speed to avoid the creation of electrostatic charges. Against the possibility of electrostatic charges: ensure a perfect equipotential connection, always use groundings, do not wear work clothes made of acrylic fibres, preferably wearing cotton clothing and conductive footwear. Comply with the essential security requirements for equipment and systems defined in Directive 2014/34/EC (ATEX 100) and with the minimum requirements for protecting the security and health of workers under the selection criteria of Directive 1999/92/EC (ATEX 137). Consult section 10 for conditions and materials that should be avoided.

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**Technical recommendations to prevent ergonomic and toxicological risks** Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

**Technical recommendations to prevent environmental risks** It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3).

### 7.2. Conditions for safe storage, including any incompatibilities

**Technical measures for storage** Minimum Temp.: 5 °C  
Maximum Temp.: 25 °C  
Maximum Time.: 6 months

**General conditions for storage** Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5.

### 7.3. Specific end use(s)

**Specific end use(s)** Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Substances whose occupational exposure limits have to be monitored in the work environment.

Identification	Environmental limits		
<b>Methyl methacrylate</b> CAS: 80-62-6    EC: 201-297-1	IOELV (8h)	50 ppm	
	IOELV (STEL)	100 ppm	
<b>n-butyl acrylate</b> CAS: 141-32-2    EC: 205-480-7	IOELV (8h)	2 ppm	11 mg/m <sup>3</sup>
	IOELV (STEL)	10 ppm	53 mg/m <sup>3</sup>

#### DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
<b>Methyl methacrylate</b> CAS: 80-62-6 EC: 201-297-1	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	13.67 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	208 mg/m <sup>3</sup>	208 mg/m <sup>3</sup>
<b>n-butyl acrylate</b> CAS: 141-32-2 EC: 205-480-7	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	Non-applicable	11 mg/m <sup>3</sup>
<b>2,2'-ethylenedioxydiethyl dimethacrylate</b> CAS: 109-16-0 EC: 203-652-6	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	13.9 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	96.9 mg/m <sup>3</sup>	Non-applicable

#### DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
<b>Methyl methacrylate</b> CAS: 80-62-6 EC: 201-297-1	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	8.2 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	74.3 mg/m <sup>3</sup>	104 mg/m <sup>3</sup>

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<b>2,2'-ethylenedioxydiethyl dimethacrylate</b> CAS: 109-16-0 EC: 203-652-6	Oral	Non-applicable	Non-applicable	8.33 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	8.33 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	28.9 mg/m <sup>3</sup>	Non-applicable

**PNEC:**

Identification					
<b>Methyl methacrylate</b> CAS: 80-62-6 EC: 201-297-1	STP	10 mg/L	Fresh water	0.94 mg/L	
	Soil	1.47 mg/kg	Marine water	0.94 mg/L	
	Intermittent	0.94 mg/L	Sediment (Fresh water)	5.74 mg/kg	
	Oral	Non-applicable	Sediment (Marine water)	Non-applicable	
<b>n-butyl acrylate</b> CAS: 141-32-2 EC: 205-480-7	STP	3.5 mg/L	Fresh water	0.00272 mg/L	
	Soil	1 mg/kg	Marine water	0.00027 mg/L	
	Intermittent	0.011 mg/L	Sediment (Fresh water)	0.0338 mg/kg	
	Oral	Non-applicable	Sediment (Marine water)	0.00338 mg/kg	
<b>2,2'-ethylenedioxydiethyl dimethacrylate</b> CAS: 109-16-0 EC: 203-652-6	STP	10 mg/L	Fresh water	0.164 mg/L	
	Soil	0.274 mg/kg	Marine water	0.0164 mg/L	
	Intermittent	0.164 mg/L	Sediment (Fresh water)	1.85 mg/kg	
	Oral	Non-applicable	Sediment (Marine water)	0.185 mg/kg	



**8.2. Exposure controls**

**General safety and hygiene measures in the work place**



As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Directive 89/686/EC. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1.

All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

**Respiratory protection**

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory respiratory tract protection	Filter mask for gases, vapours and particles		EN 405:2001+A1:2009	Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment.

**Specific protection for the hands**



Pictogram	PPE	Labelling	CEN Standard	Remarks
 Protective gloves against minor risks	Protective gloves against minor risks			Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional

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Mandatory hand protection				users/industrials, we recommend using CE III gloves in line with standards EN 420:2003+A1:2009 and EN ISO 374-1:2016
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As the product is a mixture of several substances, the resistance of the glove material cannot be predicted in advance with total reliability and has therefore to be checked prior to the application.



**Ocular and facial protection**

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.		EN 166:2001 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

**Bodily protection**

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory complete body protection	Antistatic and fireproof protective clothing		EN 1149-1:2006 EN 1149-2:1997 EN 1149-3:2004 EN 168:2001 EN ISO 14116:2015 EN 1149-5:2018	Limited protection against flames.
 Mandatory foot Protection	Safety footwear with antistatic and heat resistant properties		EN ISO 13287:2012 EN ISO 20345:2011	Replace boots at any sign of deterioration.

**Additional emergency measures**

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

**Environmental exposure controls**

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1 D.

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### SECTION 9: Physical and Chemical Properties

#### 9.1. Information on basic physical and chemical properties

For complete information see the product datasheet

##### **Appearance**

Physical state at 20 °C	Liquid
Appearance	Viscous
Colour	According to the markings on the package
Odour	Characteristic
Odour threshold	Non-applicable *

##### **Volatility**

Boiling point at atmospheric pressure	≥100 °C
Vapour pressure at 20 °C	2.4 kPa
Vapour pressure at 50 °C	10.83 kPa
Evaporation rate at 20 °C	Non-applicable*

##### **Product description**

Density at 20 °C	2078.5 kg/m <sup>3</sup>
Relative density at 20 °C	2.08
Dynamic viscosity at 20 °C	Non-applicable*
Kinematic viscosity at 20 °C	Non-applicable*
Kinematic viscosity at 40 °C	>20.5 cSt
Concentration	Non-applicable*
pH	Non-applicable*
Vapour density at 20 °C	Non-applicable*
Partition coefficient n-octanol/water at 20 °C	Non-applicable*
Solubility in water at 20 °C	Non-applicable*
Solubility properties	Non-applicable*
Decomposition temperature	Non-applicable*
Melting point/Freezing point	Non-applicable*
Explosive properties	Non-applicable*
Oxidising properties	Non-applicable*

##### **Flammability**

Flash point	22 °C
Flammability (solid, gas)	Non-applicable*
Autoignition temperature	292 °C
Lower flammability limit	Not available
Upper flammability limit	Not available

##### **Explosive**

Lower explosive limit	Non-applicable*
Upper explosive limit	Non-applicable*

#### 9.2. Other information

Surface tension at 20 °C	Non-applicable*
Refraction index	Non-applicable*

\* Not relevant due to the nature of the product, not providing information property of its hazards.

### SECTION 10: Stability and reactivity



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### 10.1. Reactivity

**Reactivity** No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

### 10.2. Chemical stability

**Stability** Chemically stable under the conditions of storage, handling and use.

### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

### 10.4. Conditions to avoid

Applicable for handling and storage at room temperature

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Risk of combustion	Avoid direct impact	Not applicable

### 10.5. Incompatible materials

Acids	Water	Combustive materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases

### 10.6. Hazardous decomposition products

**Hazardous decomposition products** See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO<sub>2</sub>), carbon monoxide and other organic compounds.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

The experimental information related to the toxicological properties of the product itself is not available.

#### **Dangerous health implications**

In case of exposure that is repetitive, prolonged or at concentrations higher than recommended by the occupational exposure limits, it may result in adverse effects on health depending on the means of exposure:

#### **Ingestion (acute effect)**

**Acute toxicity** Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for consumption. For more information see section 3.

**Corrosivity/Irritability** The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.

#### **Inhalation (acute effect)**

**Acute toxicity** Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for inhalation. For more information see section 3.

**Corrosivity/Irritability** Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous for inhalation. For more information see section 3.

#### **Contact with the skin and the eyes (acute effect)**

**Contact with the skin** Produces skin inflammation.

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<b>Contact with the eyes</b>	Based on available data, the classification criteria are not met. However, it does contain substances classified as dangerous for this effect. For more information see section 3.
<b>CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction)</b>	
<b>Carcinogenicity</b>	Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.
<b>IARC</b>	Methyl methacrylate (3); n-butyl acrylate (3); N,N-dimethyl-p-toluidine (2B); Titanium dioxide (2B); Quartz (1 % < RCS < 10%) <sup>(1)</sup> ; Quartz (RCS < 1 %) <sup>(1)</sup>
<b>Mutagenicity</b>	Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
<b>Reproductive toxicity</b>	Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
<b>Sensitizing effects</b>	
<b>Respiratory</b>	Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects. For more information see section 3.
<b>Cutaneous</b>	Prolonged contact with the skin can result in episodes of allergic contact dermatitis.
<b>Specific target organ toxicity (STOT) - single exposure</b>	Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous for inhalation. For more information see section 3.
<b>Specific target organ toxicity (STOT) - repeated exposure</b>	
<b>Specific target organ toxicity (STOT)-repeated exposure</b>	Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous for inhalation. For more information see section 3.
<b>Skin</b>	Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
<b>Other information</b>	Non-applicable

### Specific toxicology information on the substances

Identification	Acute toxicity		Genus
<b>Methyl methacrylate</b> CAS: 80-62-6 EC: 201-297-1	LD50 oral	5000 mg/kg	Rat
	LD50 dermal	5000 mg/kg	Rabbit
	LC50 inhalation	29.8 mg/L (4 h)	Rat
<b>n-butyl acrylate</b> CAS: 141-32-2 EC: 205-480-7	LD50 oral	4000 mg/kg	
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	
<b>2,2'-ethylenedioxydiethyl dimethacrylate</b> CAS: 109-16-0 EC: 203-652-6	LD50 oral	10837 mg/kg	Rat
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	

### Acute Toxicity Estimate (ATE mix)

ATE mix		Ingredient(s) of unknown toxicity
Oral	>2000 mg/kg (Calculation method)	Non-applicable
Dermal	>2000 mg/kg (Calculation method)	Non-applicable
Inhalation	>20 mg/L (4 h) (Calculation method)	Non-applicable

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**SECTION 12: Ecological information**

The experimental information related to the ecotoxicological properties of the product itself is not available.

**12.1. Toxicity**

Identification	Acute toxicity		Species	Genus
<b>Methyl methacrylate</b> CAS: 80-62-6 EC: 201-297-1	LC50	191 mg/L (96 h)	Lepomis macrochirus	Fish
	EC50	69 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	170 mg/L (96 h)	Selenastrum capricornutum	Algae
<b>n-butyl acrylate</b> CAS: 141-32-2 EC: 205-480-7	LC50	5.2 mg/L (96 h)	Salmo gairdneri	Fish
	EC50	230 mg/L (24 h)	Daphnia magna	Crustacean
	EC50	5.5 mg/L (96 h)	Selenastrum capricornutum	Algae
<b>2,2'-ethylenedioxydiethyl dimethacrylate</b> CAS: 109-16-0 EC: 203-652-6	LC50	16.4 mg/L (96 h)	Danio rerio	Fish
	EC50	Non-applicable		
	EC50	Non-applicable		

**12.2. Persistence and degradability**

Identification	Degradability		Biodegradability	
<b>Methyl methacrylate</b> CAS: 80-62-6 EC: 201-297-1	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	14 days
	BOD5/COD	Non-applicable	% Biodegradable	94.3 %
<b>n-butyl acrylate</b> CAS: 141-32-2 EC: 205-480-7	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	14 days
	BOD5/COD	0.56	% Biodegradable	61.3 %
<b>2,2'-ethylenedioxydiethyl dimethacrylate</b> CAS: 109-16-0 EC: 203-652-6	BOD5	Non-applicable	Concentration	10 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	85 %

**12.3. Bioaccumulative potential**

Identification	Bioaccumulation potential	
<b>Methyl methacrylate</b> CAS: 80-62-6 EC: 201-297-1	BCF	7
	Pow Log Potential	1.38 Low
	BCF	37
<b>n-butyl acrylate</b> CAS: 141-32-2 EC: 205-480-7	Pow Log Potential	2.36 Moderate

**12.4. Mobility in soil**

Identification	Absorption/desorption		Volatility	
<b>Methyl methacrylate</b> CAS: 80-62-6 EC: 201-297-1	Koc	Non-applicable	Henry	Non-applicable
	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	2.551E-2 N/m (25 °C)	Moist soil	Non-applicable

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<b>n-butyl acrylate</b> CAS: 141-32-2 EC: 205-480-7	Koc	Non-applicable	Henry	Non-applicable
	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	2.598E-2 N/m (25 °C)	Moist soil	Non-applicable
<b>2,2'-ethylenedioxydiethyl dimethacrylate</b> CAS: 109-16-0 EC: 203-652-6	Koc	78	Henry	9.26E-6 Pa·m <sup>3</sup> /mol
	Conclusion	High	Dry soil	No
	Surface tension	Non-applicable	Moist soil	No

**12.5. Results of PBT and vPvB assessment**

**Results of PBT and vPvB assessment** Product fails to meet PBT/vPvB criteria.

**12.6. Other adverse effects**

**Other adverse effects** Not described.

**SECTION 13: Disposal considerations**

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

**13.1. Waste treatment methods**

**Code** 08 01 11\*  
**Description** waste paint and varnish containing organic solvents or other hazardous substances  
**Waste class (Regulation (EU) No 1357/2014)** Dangerous

**Type of waste (Regulation (EU) No 1357/2014)** HP3 Flammable, HP4 Irritant — skin irritation and eye damage

**Waste management (disposal and evaluation)** Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See paragraph 6.2.

**Regulations related to waste management** In accordance with Annex II of Regulation (EC) No. 1907/2006 (REACH) the community or state provisions related to waste management are stated.  
 Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014.

**SECTION 14: Transport information**

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for Air Transport.

**14.1. UN number**

**ADR 2019 and RID 2019** UN1263  
**IMDG 38-16** UN1263  
**IATA/ICAO 2019** UN1263

**14.2. UN proper shipping name**

**ADR 2019 and RID 2019** PAINT  
**IMDG 38-16** PAINT  
**IATA/ICAO 2019** PAINT

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**14.3. Transport hazard class(es)**

ADR 2019 and RID 2019	3
IMDG 38-16	3
IATA/ICAO 2019	3
Transport Labels	



**14.4. Packing group**

ADR 2019 and RID 2019	II
IMDG 38-16	II
IATA/ICAO 2019	II

**14.5. Environmental hazards**

ADR 2019 and RID 2019	No
IMDG 38-16	No
IATA/ICAO 2019	No

**14.6. Special precautions for user**

<b>ADR 2019 and RID 2019</b>	
Special regulations	163, 367, 640D, 650
Tunnel restriction code	D/E
Physico-Chemical properties	See Section 9
Limited quantities	5 L
<b>IMDG 38-16</b>	
Special regulations	367, 163
EmS code	F-E, S-E
Physico-Chemical properties	See Section 9
Limited quantities	5 L
Segregation group	Non-applicable
<b>IATA/ICAO 2019</b>	
Physico-Chemical properties	See Section 9

**14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code**

ADR 2019 and RID 2019	Non-applicable
IMDG 38-16	Non-applicable
IATA/ICAO 2019	Non-applicable

**SECTION 15: Regulatory information**

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Candidate substances for authorisation under the Regulation (EC) 1907/2006 (REACH) Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date Non-applicable

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**Regulation (EC) 1005/2009, about substances that deplete the ozone layer** Non-applicable

**Article 95, REGULATION (EU) No 528/2012** Non-applicable

**REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products** Non-applicable

**Seveso III:**

Section	Description	Lower-tier requirements	Upper-tier requirements
P5c		5000	50000

**Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc ....)** Shall not be used in:  
 —ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,  
 —tricks and jokes,  
 —games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

**Specific provisions in terms of protecting people or the environment** It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

**Other legislation** The product could be affected by sectorial legislation.

**15.2. Chemical safety assessment**  
**Chemical safety assessment**

The supplier has not carried out evaluation of chemical safety.

**SECTION 16: Other information**

**Legislation related to safety data sheets** This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (Regulation (EC) No 2015/830).

**Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks** Non-applicable

**Texts of the legislative phrases mentioned in section 2** H315 - Causes skin irritation  
 H317 - May cause an allergic skin reaction  
 H225 - Highly flammable liquid and vapour

**Texts of the legislative phrases mentioned in section 3** The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3.

**CLP Regulation (EC) no. 1272/2008** Eye Irrit. 2: H319 - Causes serious eye irritation  
 Flam. Liq. 2: H225 - Highly flammable liquid and vapour  
 Flam. Liq. 3: H226 - Flammable liquid and vapour

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Skin Irrit. 2: H315 - Causes skin irritation  
Skin Sens. 1: H317 - May cause an allergic skin reaction  
STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure (Inhalation)  
STOT SE 3: H335 - May cause respiratory irritation

### Classification procedure

Skin Irrit. 2: Calculation method  
Skin Sens. 1: Calculation method  
Flam. Liq. 2: Calculation method (2.6.4.3)

### Advice related to training

Minimal training is recommended to prevent industrial risks for staff using this product, in order to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

### Principal bibliographical sources

<http://echa.europa.eu>  
<http://eur-lex.europa.eu>

### Abbreviations and acronyms

ADR: European agreement concerning the international carriage of dangerous goods by road  
IMDG: International maritime dangerous goods code  
IATA: International Air Transport Association  
ICAO: International Civil Aviation Organisation  
COD: Chemical Oxygen Demand  
BOD5: 5-day biochemical oxygen demand  
BCF: Bioconcentration factor  
LD50: Lethal Dose 50  
LC50: Lethal Concentration 50  
EC50: Effective concentration 50  
Log-POW: Octanol–water partition coefficient  
Koc: Partition coefficient of organic carbon

### Disclaimer

*This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.*

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## SAFETY DATA SHEET – Part.2

According to Regulation (EC) No 1907/2006, Annex II, as amended by Regulation (EU) 2015/830

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product Name	MMA Resin Peroxide Hardener
Product Inclusion	Part.2 of this document covers the Spectrum UltraLine L220 MMA Paint – catalyst only
Container Size	80g

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified Uses	Hardener for coatings. For professional user only.
Uses advised against	All uses not specified in this section or in section 7.3.

#### 1.3. Details of the supplier of the safety data sheet

Supplier	Meon Ltd. Railside Northarbour Spur Portsmouth PO6 3TU +44 (0) 23 9220 0606 mail@meonuk.com
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#### 1.4. Emergency Telephone Number

Emergency telephone	+44 (0) 808 118 1922
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### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### CLP Regulation (EC) no. 1272/2008

Classification of this product has been carried out in accordance with CLP Regulation (EC) no. 1272/2008	Aquatic Chronic 1: Hazardous to the aquatic environment, long-term hazard, Category 1, H410 Eye Irrit. 2: Eye irritation, Category 2, H319 Org. Perox. D: Organic peroxides, Category D, H242 Repr. 1B: Reproductive toxicity, Category 1B, H360D Skin Sens. 1: Sensitisation, skin, Category 1, H317
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#### 2.2. Label Elements

##### CLP Regulation (EC) no. 1272/2008



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Hazard pictogram(s)



Signal word

Danger

Hazard statement(s)

Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects  
 Eye Irrit. 2: H319 - Causes serious eye irritation  
 Org. Perox. D: H242 - Heating may cause a fire  
 Repr. 1B: H360D - May damage the unborn child  
 Skin Sens. 1: H317 - May cause an allergic skin reaction

Precautionary statement(s)

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking  
 P220 - Keep away from clothing and other combustible materials  
 P234 - Keep only in original packaging  
 P273 - Avoid release to the environment  
 P280 - Wear protective gloves/protective clothing/face protection  
 P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 P333+P313 - If skin irritation or rash occurs: Get medical advice/attention  
 P501 - Dispose of contents and / or containers in accordance with regulations on hazardous waste or packaging and packaging waste respectively  
 Restricted to professional users.

Additional Labelling (Annex XVII, REACH)

### 2.3. Other hazards

Other hazards

Product fails to meet PBT/vPvB criteria.  
 May form explosible dust-air mixture if dispersed.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances



Substance Non-applicable

### 3.2. Mixtures

Chemical description Organic peroxide

### Components

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification		Concentration
CAS: 84-61-7 EC: 201-545-9 Index: 607-719-00-4 REACH 01-2119978223-34-XXXX	<b>Dicyclohexyl phthalate<sup>(1)</sup></b> Regulation1272/2008	Aquatic Chronic 3: H412; Repr. 1B: H360D; Skin Sens. 1: H317 - Danger	Self-classified  20 - <50 %
CAS: 94-36-0 EC: 202-327-6 Index: 617-008-00-0 REACH 01-2119511472-50-XXXX	<b>Dibenzoyl peroxide<sup>(1)</sup></b> Regulation1272/2008	Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Eye Irrit. 2: H319; Org. Perox. B: H241; Skin Sens. 1: H317 - Danger	Self-classified  20 - <50 %

<sup>1</sup> Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2015/830  
 To obtain more information on the risk of the substances consult sections 8, 11, 12, 15 and 16.

Other information

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Identification	M-factor	
<b>Dibenzoyl peroxide</b> CAS: 94-36-0      EC: 202-327-6	Acute	10
	Chronic	10

### SECTION 4: First aid measures

As a general rule, in case of doubt or if symptoms persist, always call a doctor. NEVER induce swallowing by an unconscious person.

#### 4.1. Description of first aid measures

<b>General information</b>	The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.
<b>Inhalation</b>	This product does not contain substances classified as hazardous for inhalation, however, in case of symptoms of intoxication remove the person affected from the exposure area and provide with fresh air. Seek medical attention if the symptoms get worse or persist.
<b>Ingestion/Aspiration</b>	In case of consumption, seek immediate medical assistance showing the SDS of this product.
<b>Skin contact</b>	Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.
<b>Eye contact</b>	Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, as this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

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

Acute and delayed effects are indicated in sections 2 and 11.

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

Non-applicable.

### SECTION 5: Firefighting measures

Flammable. Chemical powders, carbon dioxide and other extinguishing gas are suitable for small fires.

#### 5.1. Extinguishing media

<b>Suitable extinguishing media</b>	If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	IT IS RECOMMENDED NOT to use tap water as an extinguishing agent.

#### 5.2. Special hazards arising from the substance or mixture

<b>Specific hazards</b>	As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.
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#### 5.3. Advice for firefighters

<b>Advice or firefighters</b>	Depending on the magnitude of the fire it may be necessary to use full protective clothing and individual respiratory equipment. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.
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**Additional provisions** Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Destroy any source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflammation, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

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### SECTION 6: Accidental release measures

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

**Personal precautions** Sweep up and shovel product or other means and place in container for reuse (preferred) or disposal

#### **6.2. Environmental precautions**

**Environmental precautions** Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

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

**Methods for cleaning up** It is recommended:  
Sweep up and shovel product or other means and place in container for reuse (preferred) or disposal

#### **6.4. Reference to other sections**

**Reference to other sections** See sections 8 and 13.

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### SECTION 7: Handling and storage

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Requirements relating to storage premises apply to all facilities where the mixture is handled.

#### **7.1. Precautions on safe handling**

**Precautions for safe manipulation** Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

**Technical recommendations for the prevention of fires and explosions** Due to its non-flammable nature, the product does not present a fire risk under normal conditions of storage, manipulation and use.

**Technical recommendations to prevent ergonomic and toxicological risks** PREGNANT WOMEN SHOULD NOT BE EXPOSED TO THIS PRODUCT. Transfer in fixed places that comply with the necessary security conditions (emergency showers and eyewash stations in close proximity), using personal protection equipment, especially on the hands and face (See section 8). Limit manual transfers to containers of small amounts. Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

**Technical recommendations to prevent environmental risks** Sweep up and shovel product or other means and place in container for reuse (preferred) or disposal See sections 8 and 13.

#### **7.2. Conditions for safe storage, including any incompatibilities**

**Technical measures for storage** Minimum Temp.: 5 °C  
Maximum Temp.: 25 °C  
Maximum Time.: 6 months

**General conditions for storage** Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5.

#### **7.3. Specific end use(s)**

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### Specific end use(s)

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

Substances whose occupational exposure limits have to be monitored in the work environment.

Nuisance dust: Inhalable dust 10 mg/m<sup>3</sup> // Respirable dust 4 mg/m<sup>3</sup>

#### DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
<b>Dicyclohexyl phthalate</b> CAS: 84-61-7 EC: 201-545-9	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	0.5 mg/kg	Non-applicable	0.5 mg/kg	Non-applicable
	Inhalation	35.2 mg/m <sup>3</sup>	Non-applicable	35.2 mg/m <sup>3</sup>	Non-applicable
<b>Dibenzoyl peroxide</b> CAS: 94-36-0 EC: 202-327-6	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	6.6 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	11.75 mg/m <sup>3</sup>	Non-applicable

#### DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
<b>Dicyclohexyl phthalate</b> CAS: 84-61-7 EC: 201-545-9	Oral	Non-applicable	Non-applicable	0.25 mg/kg	Non-applicable
	Dermal	0.25 mg/kg	Non-applicable	0.25 mg/kg	Non-applicable
	Inhalation	0.87 mg/m <sup>3</sup>	Non-applicable	0.87 mg/m <sup>3</sup>	Non-applicable
<b>Dibenzoyl peroxide</b> CAS: 94-36-0 EC: 202-327-6	Oral	Non-applicable	Non-applicable	1.65 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	3.3 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	2.9 mg/m <sup>3</sup>	Non-applicable

#### PNEC:

Identification				
<b>Dicyclohexyl phthalate</b> CAS: 84-61-7 EC: 201-545-9	STP	10 mg/L	Fresh water	0.00362 mg/L
	Soil	0.21 mg/kg	Marine water	0.000362 mg/L
	Intermittent	0.0362 mg/L	Sediment (Fresh water)	1.06 mg/kg
	Oral	133000 g/kg	Sediment (Marine water)	0.106 mg/kg
<b>Dibenzoyl peroxide</b> CAS: 94-36-0 EC: 202-327-6	STP	0.35 mg/L	Fresh water	0.000602 mg/L
	Soil	0.0758mg/kg	Marine water	0.0000602 mg/L
	Intermittent	0.000602 mg/L	Sediment (Fresh water)	0.338 mg/kg
	Oral	6.67 g/kg	Sediment (Marine water)	Non-applicable

#### 8.2. Exposure controls

##### General safety and hygiene measures in the work place



As a preventative measure it is recommended to use basic Personal Protection Equipment, with the corresponding <<CE marking>> in accordance with Directive 89/686/EC. For more information on Personal Protection Equipment (storage, use,

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cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1.

All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

### Respiratory protection



Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory respiratory tract protection	Filter mask for gases, vapours and particles		EN 149:2001+A1:2009 EN 405:2001+A1:2009	Replace when an increase in resistance to breathing is observed and/or a smell or taste of the contaminant is detected.

### Specific protection for the hands

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	NON-disposable chemical protective gloves		EN 374-1:2003 EN 374-3:2003/AC:2006 EN 420:2003+A1:2009	The Breakthrough Time indicated by the manufacturer must exceed the period during which the product is being used. Do not use protective creams after the product has come into contact with skin.

As the product is a mixture of several substances, the resistance of the glove material cannot be predicted in advance with total reliability and has therefore to be checked prior to the application

### Ocular and facial protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Face mask		EN 166:2001 EN 167:2001 EN 168:2001 EN ISO 4007:2012	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.



### Bodily protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory bodily protection	Disposable clothing for protection against chemical risks, with		EN 1149-1,2,3 EN 13034:2005+A1:2009 EN ISO 13982-1:2004/A1:2010 EN ISO 6529:2001	For professional use only. Clean periodically according to the manufacturer's instructions.

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Mandatory complete body protection	antistatic and fireproof properties		EN ISO 6530:2005 EN ISO 13688:2013 EN 464:1994	
 Mandatory foot Protection	Safety footwear for protection against chemical risk, with antistatic and heat resistant properties		EN 13287:2008 EN ISO 20345:2011 EN 13832-1:2006	Replace boots at any sign of deterioration.

**Additional emergency measures**

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2002	 Eyewash stations	DIN 12 899 ISO 3864-1:2002

**Environmental exposure controls**

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1 D.

**SECTION 9: Physical and Chemical Properties**

**9.1. Information on basic physical and chemical properties**

For complete information see the product datasheet

**Appearance**

Physical state at 20 °C	Solid
Appearance	Powdery
Colour	White
Odour	Characteristic
Odour threshold	Non-applicable *

**Volatility**

Boiling point at atmospheric pressure	Non-applicable *
Vapour pressure at 20 °C	Non-applicable *
Vapour pressure at 50 °C	<300000 Pa (300 kPa)
Evaporation rate at 20 °C	Non-applicable*

**Product description**

Density at 20 °C	630 kg/m <sup>3</sup>
Relative density at 20 °C	Non-applicable*
Dynamic viscosity at 20 °C	Non-applicable*
Kinematic viscosity at 20 °C	Non-applicable*
Kinematic viscosity at 40 °C	Non-applicable*
Concentration	Non-applicable*
pH	Non-applicable*
Vapour density at 20 °C	Non-applicable*
Partition coefficient n-octanol/water at 20 °C	Non-applicable*
Solubility in water at 20 °C	Non-applicable*
Solubility properties	Non-applicable*

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**Decomposition temperature** 62 °C  
**Melting point/Freezing point** Non-applicable\*  
**Explosive properties** Non-applicable\*  
**Oxidising properties** Non-applicable\*

**Flammability**

**Flash point** Non-applicable\*  
**Flammability (solid, gas)** Non-applicable\*  
**Autoignition temperature** Non-applicable\*  
**Lower flammability limit** Non-applicable\*  
**Upper flammability limit** Non-applicable\*

**Explosive**

**Lower explosive limit** Non-applicable\*  
**Upper explosive limit** Non-applicable\*

**9.2. Other information**

**Surface tension at 20 °C** Non-applicable\*  
**Refraction index** Non-applicable\*

\* Not relevant due to the nature of the product, not providing information property of its hazards.

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

**Reactivity** No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

**10.2. Chemical stability**

**Stability** Chemically stable under the conditions of storage, handling and use.

**10.3. Possibility of hazardous reactions**

**Possibility of hazardous reactions** Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

**10.4. Conditions to avoid**

Applicable for handling and storage at room temperature

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Precaution	Avoid direct impact	Not applicable

**10.5. Incompatible materials**

Acids	Water	Combustive materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	Avoid direct impact	Avoid alkalines, heavy metals, reducing agents, peroxide accelerating agents

**10.6. Hazardous decomposition products**

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**Hazardous decomposition products** See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO<sub>2</sub>), carbon monoxide and other organic compounds.

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### SECTION 11: Toxicological information

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#### **11.1. Information on toxicological effects**

The experimental information related to the toxicological properties of the product itself is not available.

#### **Dangerous health implications**

In case of exposure that is repetitive, prolonged or at concentrations higher than recommended by the occupational exposure limits, it may result in adverse effects on health depending on the means of exposure:

#### **Ingestion (acute effect)**

**Acute toxicity** Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for consumption. For more information see section 3.

**Corrosivity/Irritability** Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

#### **Inhalation (acute effect)**

**Acute toxicity** Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

**Corrosivity/Irritability** Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

#### **Contact with the skin and the eyes (acute effect)**

**Contact with the skin** Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for skin contact. For more information see section 3.

**Contact with the eyes** Produces eye damage after contact.

#### **CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction)**

**Carcinogenicity** Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.

**Mutagenicity** Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

**Reproductive toxicity** May damage the unborn child.

#### **Sensitizing effects**

**Respiratory** Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects. For more information see section 3.

**Cutaneous** Prolonged contact with the skin can result in episodes of allergic contact dermatitis.

#### **Specific target organ toxicity (STOT) - single exposure**

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

#### **Specific target organ toxicity (STOT) - repeated exposure**

#### **Specific target organ toxicity (STOT)-repeated exposure**

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

**Skin** Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

#### **Aspiration hazard**

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.



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**Other information** Non-applicable.

**Specific toxicology information on the substances:**

Identification	Acute toxicity		Genus
<b>Dibenzoyl peroxide</b> CAS: 94-36-0 EC: 202-327-6	LD50 oral	7710 mg/kg	Rat
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	

**Acute Toxicity Estimate (ATE mix)**

	ATE mix	Ingredient(s) of unknown toxicity
Oral	>2000 mg/kg (Calculation method)	Non-applicable
Dermal	>2000 mg/kg (Calculation method)	Non-applicable
Inhalation	>5 mg/L (4 h) (Calculation method)	Non-applicable

**SECTION 12: Ecological information**

The experimental information related to the ecotoxicological properties of the product itself is not available.

**12.1. Toxicity**

Identification	Acute toxicity		Species	Genus
<b>Dicyclohexyl phthalate</b> CAS: 84-61-7 EC: 201-545-9	LC50	10 - 100 mg/L (96 h)		Fish
	EC50	10 - 100 mg/L		Crustacean
	EC50	10 - 100 mg/L		Algae
<b>Dibenzoyl peroxide</b> CAS: 94-36-0 EC: 202-327-6	LC50	0.0602 mg/L (96 h)	Oncorhynchus mykiss	Fish
	EC50	0.11 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	0.071 mg/L (72 h)	Pseudokirchneriella subcapitata	Algae

**12.2. Persistence and degradability**

Identification	Degradability		Biodegradability	
<b>Dibenzoyl peroxide</b> CAS: 94-36-0 EC: 202-327-6	BOD5	Non-applicable	Concentration	Non-applicable
	COD	Non-applicable	Period	10 days
	BOD5/COD	Non-applicable	% Biodegradable	68 %

**12.3. Bioaccumulative potential**

**Bioaccumulative potential** Not available

**12.4. Mobility in soil**

Identification	Absorption/desorption		Volatility	
<b>Dibenzoyl peroxide</b> CAS: 94-36-0 EC: 202-327-6	Koc	6309.57	Henry	Non-applicable
	Conclusion	Immobile	Dry soil	Non-applicable
	Surface tension	Non-applicable	Moist soil	Non-applicable

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### 12.5. Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** Product fails to meet PBT/vPvB criteria.

### 12.6. Other adverse effects

**Other adverse effects** Not described.

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### **SECTION 13: Disposal considerations**

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Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

#### 13.1. Waste treatment methods

<b>Code</b>	08 01 11*
<b>Description</b>	Waste paint and varnish containing organic solvents or other dangerous substances
<b>Waste class (Regulation (EU) No 1357/2014)</b>	Dangerous
<b>Type of waste (Regulation (EU) No 1357/2014)</b>	HP14 Ecotoxic, HP3 Flammable, HP4 Irritant - skin irritation and eye damage, HP13 Sensitising, HP10 Toxic for reproduction
<b>Waste management (disposal and evaluation)</b>	Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See paragraph 6.2.
<b>Regulations related to waste management</b>	In accordance with Annex II of Regulation (EC) No. 1907/2006 (REACH) the community or state provisions related to waste management are stated. Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

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### **SECTION 14: Transport information**

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Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for Air Transport.

#### 14.1. UN number

<b>ADR 2017 and RID 2017</b>	UN3106
<b>IMDG 38-16</b>	UN3106
<b>IATA/ICAO 2017</b>	UN3106

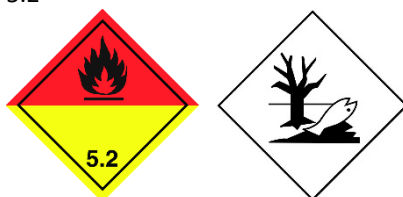
#### 14.2. UN proper shipping name

<b>ADR 2017 and RID 2017</b>	ORGANIC PEROXIDE TYPE D, SOLID (Dibenzoyl peroxide)
<b>IMDG 38-16</b>	ORGANIC PEROXIDE TYPE D, SOLID (Dibenzoyl peroxide)
<b>IATA/ICAO 2017</b>	ORGANIC PEROXIDE TYPE D, SOLID (Dibenzoyl peroxide)

#### 14.3. Transport hazard class(es)

<b>ADR 2017 and RID 2017</b>	5.2
<b>IMDG 38-16</b>	5.2
<b>IATA/ICAO 2017</b>	5.2

**Transport Labels**



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**14.4. Packing group**

ADR 2017 and RID 2017	N/A
IMDG 38-16	N/A
IATA/ICAO 2017	N/A

**14.5. Environmental hazards**

ADR 2017 and RID 2017	Yes
IMDG 38-16	Yes
IATA/ICAO 2017	Yes

**14.6. Special precautions for user**

<b>ADR 2017 and RID 2017</b>	
Special regulations	122, 274
Tunnel restriction code	D
Physico-Chemical properties	See Section 9
Limited quantities	500 g
<b>IMDG 38-16</b>	
Special regulations	122, 274
EmS code	F-J, S-R
Physico-Chemical properties	See Section 9
Limited quantities	500 g
<b>IATA/ICAO 2017</b>	
Physico-Chemical properties	See Section 9

**14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code**

ADR 2017 and RID 2017	Non-applicable
IMDG 38-16	Non-applicable
IATA/ICAO 2017	Non-applicable

**SECTION 15: Regulatory information**

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Candidate substances for authorisation under the Regulation (EC) 1907/2006 (REACH) Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date Non-applicable

Regulation (EC) 1005/2009, about substances that deplete the ozone layer Non-applicable

Article 95, REGULATION (EU) No 528/2012 Non-applicable

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products Non-applicable

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<b>Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc ....)</b>	Product classified hazardous under the CMR. Sale and distribution to the general public is prohibited. Due to its CMR category, it is essential to apply the specific measures for workplace hazard prevention covered in articles 4 and 5 of the 2004/37/EC Directive and later modifications.
<b>Specific provisions in terms of protecting people or the environment</b>	It is recommended to use the information included in this safety data sheet as data used in a risk evaluation of the local circumstances in order to establish the necessary risk prevention measures for the manipulation, use, storage and disposal of this product.
<b>Other legislation</b>	The product could be affected by sectorial legislation
<b>15.2. Chemical safety assessment</b>	
<b>Chemical safety assessment</b>	The supplier has not carried out evaluation of chemical safety.

### SECTION 16: Other information

<b>Legislation related to safety data sheets</b>	This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (Regulation (EC) No 2015/830).
<b>Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks</b>	Non-applicable
<b>Texts of the legislative phrases mentioned in section 2</b>	H319 - Causes serious eye irritation H317 - May cause an allergic skin reaction H410 - Very toxic to aquatic life with long lasting effects H242 - Heating may cause a fire H360D - May damage the unborn child.
<b>Texts of the legislative phrases mentioned in section 3</b>	The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3.
<b>CLP Regulation (EC) no. 1272/2008</b>	Aquatic Acute 1: H400 - Very toxic to aquatic life Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects Eye Irrit. 2: H319 - Causes serious eye irritation Org. Perox. B: H241 - Heating may cause a fire or explosion Repr. 1B: H360D - May damage the unborn child. Skin Sens. 1: H317 - May cause an allergic skin reaction
<b>Classification procedure</b>	Eye Irrit. 2: Calculation method Skin Sens. 1: Calculation method Aquatic Chronic 1: Calculation method Repr. 1B: Calculation method
<b>Advice related to training</b>	Minimal training is recommended to prevent industrial risks for staff using this product, in order to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

## Spectrum UltraLine L220 MMA Paint [Part.1 – Base | Part.2 – Catalyst]

**Principal bibliographical sources** <http://echa.europa.eu>  
<http://eur-lex.europa.eu>

**Abbreviations and acronyms** ADR: European agreement concerning the international carriage of dangerous goods by road  
IMDG: International maritime dangerous goods code  
IATA: International Air Transport Association  
ICAO: International Civil Aviation Organisation  
COD: Chemical Oxygen Demand  
BOD5: 5-day biochemical oxygen demand  
BCF: Bioconcentration factor  
LD50: Lethal Dose 50  
LC50: Lethal Concentration 50  
EC50: Effective concentration 50  
Log-POW: Octanol–water partition coefficient  
Koc: Partition coefficient of organic carbon

### *Disclaimer*

*This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.*