

Spectrum UltraStripe L220 Sprayable MMA Paint
[Part.1 – Base.A | Part.2 – Base.B | Part.3 – 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

Product Name	Spectrum UltraStripe L220 Sprayable MMA Paint
Product Inclusion	Part.1 of this document covers all colour variations within the Spectrum UltraStripe Sprayable MMA Paint range – Base.A only
Container Size	20kg

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

Identified Uses	Base for road marking filler (3 components) – mix with UltraStripe Part B and Hardener before use. Use only the hardener of the same reference. Respect the dosage Part A/ Part B /Hardener indicated by the supplier.
Uses advised against	For professional user/industrial user only. 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
-----------------	---

1.4. Emergency Telephone Number

Emergency telephone	+44 (0) 808 118 1922
----------------------------	----------------------

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	Flam. Liq. 2: Flammable liquids, Category 2, H225 Skin Irrit. 2: Skin irritation, Category 2, H315 Skin Sens. 1: Sensitisation, skin, Category 1, H317 STOT SE 3: Respiratory tract toxicity, single exposure, Category 3, H335
---	--

2.2. Label Elements

CLP Regulation (EC) no. 1272/2008

Spectrum UltraStripe L220 Sprayable MMA Paint
[Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]

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
 H335 - May cause respiratory irritation

Precautionary statement(s)

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
 P260 - Do not breathe dust/fume/gas/mist/vapours/spray
 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
 P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 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 the contents/containers in accordance with the current legislation on waste treatment

Substances that contribute to the classification

Methyl methacrylate; 2-ethylhexyl acrylate; 2-hydroxypropyl methacrylate

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: 80-62-6 EC: 201-297-1 Index: 607-035-00-6 REACH 01-2119452498-28-XXXX	Methyl methacrylate⁽¹⁾	ATP CLP00	10 - <20 %
	Regulation1272/2008	Flam. Liq. 2: H225; Skin Irrit. 2: H315; Skin Sens. 1: H317; STOT SE 3: H335 - Danger	
CAS: 103-11-7 EC: 203-080-7 Index: 607-107-00-7 REACH 01-2119453158-37-XXXX	2-ethylhexyl acrylate⁽¹⁾	ATP CLP00	2.5 - <10 %
	Regulation1272/2008	Skin Irrit. 2: H315; Skin Sens. 1: H317; STOT SE 3: H335 - Warning	
CAS: 923-26-2 EC: 213-090-3 Index: 607-125-00-5 REACH Non-applicable	2-hydroxypropyl methacrylate⁽¹⁾	ATP CLP00	2.5 - <10 %
	Regulation1272/2008	Eye Irrit. 2: H319; Skin Sens. 1: H317 - Warning	

Spectrum UltraStripe L220 Sprayable MMA Paint

[Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]

⁽¹⁾ 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

General information	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.
Inhalation	Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.
Ingestion/Aspiration	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.
Skin contact	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.
Eye contact	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

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

5.2. Special hazards arising from the substance or mixture

Specific hazards	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.
-------------------------	---

5.3. Advice for firefighters

Advice or firefighters	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.
-------------------------------	--

Spectrum UltraStripe L220 Sprayable MMA Paint

[Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]

Additional provisions 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

Personal precautions 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.

6.2. Environmental precautions

Environmental precautions This product is not classified as hazardous to the environment. Keep product away from drains, surface and underground water.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up 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.

6.4. Reference to other sections

Reference to other sections See sections 8 and 13.

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

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 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.

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).

Spectrum UltraStripe L220 Sprayable MMA Paint
[Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]

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		
Methyl methacrylate CAS: 80-62-6 EC: 201-297-1	IOELV (8h)	50 ppm	
	IOELV (STEL)	100 ppm	

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Methyl methacrylate 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 ³	208 mg/m ³
2-ethylhexyl acrylate CAS: 103-11-7 EC: 203-080-7	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	37.5 mg/m ³

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Methyl methacrylate 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 ³	104 mg/m ³
2-ethylhexyl acrylate CAS: 103-11-7 EC: 203-080-7	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	4.5 mg/m ³

PNEC:

Identification					
Methyl methacrylate 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	

Spectrum UltraStripe L220 Sprayable MMA Paint
[Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]

2-ethylhexyl acrylate CAS: 103-11-7 EC: 203-080-7	Oral	Non-applicable	Sediment (Marine water)	Non-applicable
	STP	2.3 mg/L	Fresh water	0.00272 mg/L
	Soil	1 mg/kg	Marine water	0.000272 mg/L
	Intermittent	0.011 mg/L	Sediment (Fresh water)	0.126 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0.0126 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 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	Protective gloves against minor risks			Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN 420:2003+A1:2009 and EN ISO 374-1:2016





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.

Spectrum UltraStripe L220 Sprayable MMA Paint
[Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]

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.

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	2.8 kPa
Vapour pressure at 50 °C	12.31 kPa
Evaporation rate at 20 °C	Non-applicable*

Product description

Density at 20 °C	2006.1 kg/m ³
Relative density at 20 °C	2.0
Dynamic viscosity at 20 °C	Non-applicable*

Spectrum UltraStripe L220 Sprayable MMA Paint
[Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]

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	11 °C
Flammability (solid, gas)	Non-applicable*
Autoignition temperature	258 °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

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

Spectrum UltraStripe L220 Sprayable MMA Paint
[Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]

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 ₂), 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	Causes irritation in respiratory passages, which is normally reversible and limited to the upper respiratory passages.
---------------------------------	--

Contact with the skin and the eyes (acute effect)

Contact with the skin	Produces skin inflammation.
------------------------------	-----------------------------

Contact with the eyes	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.
------------------------------	--

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	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.
------------------------------	--

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	Causes irritation in respiratory passages, which is normally reversible and limited to the upper respiratory passages.
--	--

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.
--	--

Spectrum UltraStripe L220 Sprayable MMA Paint
[Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]

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.
Other information	Non-applicable

Specific toxicology information on the substances

Identification	Acute toxicity		Genus
Methyl methacrylate 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
2-ethylhexyl acrylate CAS: 103-11-7 EC: 203-080-7	LD50 oral	4435 mg/kg	Rat
	LD50 dermal	7552 mg/kg	Rabbit
	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

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
Methyl methacrylate 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

12.2. Persistence and degradability

Identification	Degradability		Biodegradability	
Methyl methacrylate 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 %

12.3. Bioaccumulative potential

Identification	Bioaccumulation potential	
Methyl methacrylate CAS: 80-62-6 EC: 201-297-1	BCF	7
	Pow Log	1.38
	Potential	Low

12.4. Mobility in soil

Spectrum UltraStripe L220 Sprayable MMA Paint
[Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]

Identification	Absorption/desorption		Volatility	
Methyl methacrylate 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
2-ethylhexyl acrylate CAS: 103-11-7 EC: 203-080-7	Koc	Non-applicable	Henry	Non-applicable
	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	2.58E-2 N/m (25 °C)	Moist soil	Non-applicable

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, HP13 Sensitising, 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

Spectrum UltraStripe L220 Sprayable MMA Paint
[Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]

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

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

Spectrum UltraStripe L220 Sprayable MMA Paint
[Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]

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
 H335 - May cause respiratory irritation
 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
 Skin Irrit. 2: H315 - Causes skin irritation

Spectrum UltraStripe L220 Sprayable MMA Paint [Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]

Skin Sens. 1: H317 - May cause an allergic skin reaction
STOT SE 3: H335 - May cause respiratory irritation

Classification procedure

Skin Irrit. 2: Calculation method
Skin Sens. 1: Calculation method
STOT SE 3: 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.

Spectrum UltraStripe L220 Sprayable MMA Paint
[Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]



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	Spectrum UltraStripe L220 Sprayable MMA Paint
Product Inclusion	Part.2 of this document covers all colour variations within the Spectrum UltraStripe Sprayable MMA Paint range – Base.B only
Container Size	20kg

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

Identified Uses	Base for road marking filler (3 components). Mix with hardener before add Part A. Use only the hardener of the same reference. Respect the dosage Part A, Part B and Hardener as indicated by the supplier.
Uses advised against	For professional user/industrial user only. 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
-----------------	---

1.4. Emergency Telephone Number

Emergency telephone	+44 (0) 808 118 1922
----------------------------	----------------------

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	Flam. Liq. 2: Flammable liquids, Category 2, H225 Skin Irrit. 2: Skin irritation, Category 2, H315 Skin Sens. 1: Sensitisation, skin, Category 1, H317 STOT SE 3: Respiratory tract toxicity, single exposure, Category 3, H335
---	--

2.2. Label Elements

CLP Regulation (EC) no. 1272/2008

Spectrum UltraStripe L220 Sprayable MMA Paint
[Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]

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
 H335 - May cause respiratory irritation

Precautionary statement(s)

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
 P260 - Do not breathe dust/fume/gas/mist/vapours/spray
 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
 P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 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 the contents/containers in accordance with the current legislation on waste treatment

Substances that contribute to the classification

Methyl methacrylate; 2-ethylhexyl acrylate

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: 80-62-6 EC: 201-297-1 Index: 607-035-00-6 REACH 01-2119452498-28-XXXX	Methyl methacrylate⁽¹⁾	ATP CLP00	10 - <20 %
	Regulation1272/2008	Flam. Liq. 2: H225; Skin Irrit. 2: H315; Skin Sens. 1: H317; STOT SE 3: H335 - Danger	
CAS: 103-11-7 EC: 203-080-7 Index: 607-107-00-7 REACH 01-2119453158-37-XXXX	2-ethylhexyl acrylate⁽¹⁾	ATP CLP00	2.5 - <10 %
	Regulation1272/2008	Skin Irrit. 2: H315; Skin Sens. 1: H317; STOT SE 3: H335 - Warning	

⁽¹⁾ 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.

Spectrum UltraStripe L220 Sprayable MMA Paint

[Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]

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

General information	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.
Inhalation	Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.
Ingestion/Aspiration	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.
Skin contact	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.
Eye contact	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

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

5.2. Special hazards arising from the substance or mixture

Specific hazards	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.
-------------------------	---

5.3. Advice for firefighters

Advice or firefighters	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.
Additional provisions	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

Spectrum UltraStripe L220 Sprayable MMA Paint

[Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]

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

Personal precautions

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.

6.2. Environmental precautions

Environmental precautions

This product is not classified as hazardous to the environment. Keep product away from drains, surface and underground water.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up

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.

6.4. Reference to other sections

Reference to other sections

See sections 8 and 13.

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

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

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.

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).

Spectrum UltraStripe L220 Sprayable MMA Paint
[Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]

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		
Methyl methacrylate CAS: 80-62-6 EC: 201-297-1	IOELV (8h)	50 ppm	
	IOELV (STEL)	100 ppm	

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Methyl methacrylate 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 ³	208 mg/m ³
2-ethylhexyl acrylate CAS: 103-11-7 EC: 203-080-7	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	37.5 mg/m ³

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Methyl methacrylate 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 ³	104 mg/m ³
2-ethylhexyl acrylate CAS: 103-11-7 EC: 203-080-7	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	4.5 mg/m ³

PNEC:

Identification					
Methyl methacrylate 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	
2-ethylhexyl acrylate CAS: 103-11-7 EC: 203-080-7	STP	2.3 mg/L	Fresh water	0.00272 mg/L	
	Soil	1 mg/kg	Marine water	0.000272 mg/L	
	Intermittent	0.011 mg/L	Sediment (Fresh water)	0.126 mg/kg	
	Oral	Non-applicable	Sediment (Marine water)	0.0126 mg/kg	

Spectrum UltraStripe L220 Sprayable MMA Paint [Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]



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 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	Protective gloves against minor risks			Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN 420:2003+A1:2009 and EN ISO 374-1:2016

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
	Antistatic and fireproof		EN 1149-1:2006 EN 1149-2:1997 EN 1149-3:2004	Limited protection against flames.

Spectrum UltraStripe L220 Sprayable MMA Paint
[Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]

 Mandatory complete body protection	protective clothing		EN 168:2001 EN ISO 14116:2015 EN 1149-5:2018	
 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.

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	2.7 kPa
Vapour pressure at 50 °C	12.2 kPa
Evaporation rate at 20 °C	Non-applicable*

Product description

Density at 20 °C	2052 kg/m ³
Relative density at 20 °C	2.052
Dynamic viscosity at 20 °C	Non-applicable*
Kinematic viscosity at 20 °C	Non-applicable*
Kinematic viscosity at 40 °C	>20.5 cSt

Spectrum UltraStripe L220 Sprayable MMA Paint
[Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]

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	11 °C
Flammability (solid, gas)	Non-applicable*
Autoignition temperature	258 °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

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

Spectrum UltraStripe L220 Sprayable MMA Paint [Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]

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 (CO₂), 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 Causes irritation in respiratory passages, which is normally reversible and limited to the upper respiratory passages.

Contact with the skin and the eyes (acute effect)

Contact with the skin Produces skin inflammation.

Contact with the eyes 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.

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 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.

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

Causes irritation in respiratory passages, which is normally reversible and limited to the upper respiratory passages.

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.

Spectrum UltraStripe L220 Sprayable MMA Paint
[Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]

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.

Other information Non-applicable

Specific toxicology information on the substances

Identification		Acute toxicity		Genus
Methyl methacrylate 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
2-ethylhexyl acrylate CAS: 103-11-7 EC: 203-080-7	LD50 oral	4435 mg/kg		Rat
	LD50 dermal	7552 mg/kg		Rabbit
	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

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
Methyl methacrylate 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

12.2. Persistence and degradability

Identification	Degradability		Biodegradability	
Methyl methacrylate 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 %

12.3. Bioaccumulative potential

Identification	Bioaccumulation potential	
Methyl methacrylate CAS: 80-62-6 EC: 201-297-1	BCF	7
	Pow Log	1.38
	Potential	Low

12.4. Mobility in soil

Identification	Absorption/desorption		Volatility	
Methyl methacrylate	Koc	Non-applicable	Henry	Non-applicable

Spectrum UltraStripe L220 Sprayable MMA Paint
[Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]

CAS: 80-62-6 EC: 201-297-1	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	2.551E-2 N/m (25 °C)	Moist soil	Non-applicable
2-ethylhexyl acrylate	Koc	Non-applicable	Henry	Non-applicable
CAS: 103-11-7 EC: 203-080-7	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	2.58E-2 N/m (25 °C)	Moist soil	Non-applicable

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, HP13 Sensitising, 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

14.3. Transport hazard class(es)

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

Spectrum UltraStripe L220 Sprayable MMA Paint
[Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]

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

ADR 2019 and RID 2019	
Special regulations	163, 367, 640D, 650
Tunnel restriction code	D/E
Physico-Chemical properties	See Section 9
Limited quantities	5 L
IMDG 38-16	
Special regulations	367, 163
EmS code	F-E, S-E
Physico-Chemical properties	See Section 9
Limited quantities	5 L
Segregation group	Non-applicable
IATA/ICAO 2019	
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
Regulation (EC) 1005/2009, about substances that deplete the ozone layer	Non-applicable

Spectrum UltraStripe L220 Sprayable MMA Paint
[Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]

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
 H335 - May cause respiratory irritation
 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 Flam. Liq. 2: H225 - Highly flammable liquid and vapour
 Skin Irrit. 2: H315 - Causes skin irritation
 Skin Sens. 1: H317 - May cause an allergic skin reaction
 STOT SE 3: H335 - May cause respiratory irritation

Spectrum UltraStripe L220 Sprayable MMA Paint
[Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]

Classification procedure	Skin Irrit. 2: Calculation method Skin Sens. 1: Calculation method STOT SE 3: 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.

Spectrum UltraStripe L220 Sprayable MMA Paint
[Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]



SAFETY DATA SHEET – Part.3

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	Spectrum UltraStripe L220 Sprayable MMA Paint
Product Inclusion	Part.3 of this document covers the Spectrum UltraStripe Sprayable catalyst only.
Container Size	80g

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

Identified Uses	Hardener for road marking filler (3 components). Mix only with the UltraStripe Part B. Respect the dosage of Part B to Hardener as indicated by the supplier.
Uses advised against	Hardener for coatings. For professional user only. 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
-----------------	---

1.4. Emergency Telephone Number

Emergency telephone	+44 (0) 808 118 1922
----------------------------	----------------------

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
---	---

2.2. Label Elements

CLP Regulation (EC) no. 1272/2008

Spectrum UltraStripe L220 Sprayable MMA Paint
[Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]

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	Dicyclohexyl phthalate⁽¹⁾ 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	Dibenzoyl peroxide⁽¹⁾ 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 %

¹ 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

Spectrum UltraStripe L220 Sprayable MMA Paint
[Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]

Identification	M-factor	
Dibenzoyl peroxide 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

General information	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.
Inhalation	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.
Ingestion/Aspiration	In case of consumption, seek immediate medical assistance showing the SDS of this product.
Skin contact	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.
Eye contact	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

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

5.2. Special hazards arising from the substance or mixture

Specific hazards	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.
-------------------------	---

5.3. Advice for firefighters

Advice or firefighters	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.
-------------------------------	---

Spectrum UltraStripe L220 Sprayable MMA Paint [Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]

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.
------------------------------	--

SECTION 6: Accidental release measures

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.
------------------------------------	------------------------

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

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)

Spectrum UltraStripe L220 Sprayable MMA Paint
[Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]

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/m³ // Respirable dust 4 mg/m³

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Dicyclohexyl phthalate 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 ³	Non-applicable	35.2 mg/m ³	Non-applicable
Dibenzoyl peroxide 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 ³	Non-applicable

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Dicyclohexyl phthalate 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 ³	Non-applicable	0.87 mg/m ³	Non-applicable
Dibenzoyl peroxide 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 ³	Non-applicable

PNEC:

Identification				
Dicyclohexyl phthalate 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
Dibenzoyl peroxide 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,

Spectrum UltraStripe L220 Sprayable MMA Paint
[Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]



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
 	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.

Spectrum UltraStripe L220 Sprayable MMA Paint
[Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]

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 ³
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*

Spectrum UltraStripe L220 Sprayable MMA Paint
[Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]

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

Spectrum UltraStripe L220 Sprayable MMA Paint

[Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]

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 (CO₂), 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

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. Produces eye damage after contact.

Contact with the eyes

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.

Spectrum UltraStripe L220 Sprayable MMA Paint
[Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]

Other information Non-applicable.

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
Dibenzoyl peroxide 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
Dicyclohexyl phthalate 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
Dibenzoyl peroxide 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	
Dibenzoyl peroxide CAS: 94-36-0 EC: 202-327-6	BOD5	Non-applicable	Concentration	Non-applicable
	COD	Non-applicable		Period
	BOD5/COD	Non-applicable	% Biodegradable	68 %

12.3. Bioaccumulative potential

Bioaccumulative potential Not available

12.4. Mobility in soil

Identification	Absorption/desorption		Volatility	
Dibenzoyl peroxide 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

Spectrum UltraStripe L220 Sprayable MMA Paint
[Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]

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 dangerous substances
Waste class (Regulation (EU) No 1357/2014)	Dangerous
Type of waste (Regulation (EU) No 1357/2014)	HP14 Ecotoxic, HP3 Flammable, HP4 Irritant - skin irritation and eye damage, HP13 Sensitising, HP10 Toxic for reproduction
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

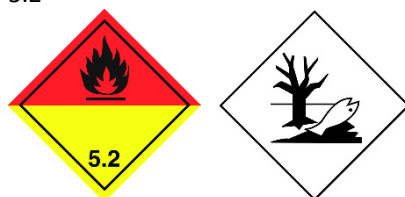
ADR 2017 and RID 2017	UN3106
IMDG 38-16	UN3106
IATA/ICAO 2017	UN3106

14.2. UN proper shipping name

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

14.3. Transport hazard class(es)

ADR 2017 and RID 2017	5.2
IMDG 38-16	5.2
IATA/ICAO 2017	5.2
Transport Labels	



Spectrum UltraStripe L220 Sprayable MMA Paint
[Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]

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

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

Spectrum UltraStripe L220 Sprayable MMA Paint
[Part.1 – Base.A | Part.2 – Base.B | Part.3 – Catalyst]

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc)	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.
Specific provisions in terms of protecting people or the environment	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.
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	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.
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	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
Classification procedure	Eye Irrit. 2: Calculation method Skin Sens. 1: Calculation method Aquatic Chronic 1: Calculation method Repr. 1B: Calculation method
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.

Spectrum UltraStripe L220 Sprayable MMA Paint [Part.1 – Base.A | Part.2 – Base.B | Part.3 – 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.