



SAFETY DATA SHEET

Ardenbrite Metallic Paint

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

**1.1 Product identifier** 

Product name

**Product type** 

- : Ardenbrite Metallic Paint
- Product description
- : Liquid.

: Paint.

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

Identified uses			
Industrial uses Consumer uses Professional uses	Consumer uses		
Uses advised against Reason			
None identified.		-	

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

Manufactured by Tor Coatings Limited Portobello Industrial Estate Birtley County Durham United Kingdom DH3 2RE Telephone no.: +44 (0) 191 411 3146 Fax no.: +44 (0) 191 411 3147 enquiries@tor-coatings.com www.ardenbrite.com

e-mail address of person : rpmeurohas@ro-m.com responsible for this SDS

### **1.4 Emergency telephone number**

 Supplier

 Telephone number
 : +44 (0) 207 858 1228

 Hours of operation
 : 24 / 7

## **SECTION 2: Hazards identification**

## 2.1 Classification of the substance or mixture

Product definition : Mixture

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

Flam. Liq. 2, H225

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

Date	of	issue	Date	of	revision	
Date	01	133UC/	Date	<b>U</b> 1	revision	

1/15



Ardenbrite Metallic Paint

# **SECTION 2: Hazards identification**

ŝ

## 2.2 Label elements

**Hazard pictograms** 



Signal word	:	Danger
Hazard statements	:	Highly flammable liquid and vapour.
Precautionary statements		
General	1	P102 - Keep out of reach of children. P103 - Read label before use. P101 - If medical advice is needed, have product container or label at hand.
Prevention	:	P210 - Keep away from heat, sparks, open flames and hot surfaces No smoking.
Response	:	P370 - In case of fire: P378 - Use water spray, dry chemical powder or carbon dioxide for extinction.
Storage	:	P403 - Store in a well-ventilated place. P235 - Keep cool.
Disposal	1	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
		Not applicable.
Supplemental label elements	1	Not applicable.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	:	Not applicable.
Special packaging requirem	nen	its
Containers to be fitted with child-resistant fastenings	1	Not applicable.
Tactile warning of danger	;	Yes, applicable.
2.3 Other hazards		
Others have a sublet by the		No

Other hazards which do : None known. not result in classification

# **SECTION 3: Composition/information on ingredients**

3.2 Mixtures	: Mixture			
			Classification	
Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Туре
ethanol	REACH #: Not yet registered EC: 200-578-6 CAS: 64-17-5 Index: 603-002-00-5	≥50 - ≤75	Flam. Liq. 2, H225	[2]
aluminium powder (stabilized)	EC: 231-072-3 CAS: 7429-90-5 Index: 013-002-00-1	≥10 - ≤25	Flam. Sol. 1, H228 Water-react. 2, H261	[2]
Naphtha (petroleum), hydrotreated heavy	REACH #: Not yet registered	≤10	Asp. Tox. 1, H304 EUH066	[1]
Date of issue/Date of revision	on : 17/04/2018	Date of previous issue	: 2/05/2017 Version : 2	2/15



Ardenbrite Metallic Paint

## **SECTION 3: Composition/information on ingredients**

L	•	5	•	
4-hydroxy- 4-methylpentan-2-one	EC: 265-150-3 CAS: 64742-48-9 Index: 649-327-00-6 REACH #: 01-2119473975-21 EC: 204-626-7 CAS: 123-42-2 Index: 603-016-00-1	≤5	Eye Irrit. 2, H319	[1] [2]
methanol	REACH #: 01-2119433307-44 EC: 200-659-6 CAS: 67-56-1 Index: 603-001-00-X	≤3	Flam. Liq. 2, H225 Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 3, H331 STOT SE 1, H370 See Section 16 for the full text of the H statements declared above.	[1] [2]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Туре

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII

[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

[5] Substance of equivalent concern

[6] Additional disclosure due to company policy

Occupational exposure limits, if available, are listed in Section 8.

## **SECTION 4: First aid measures**

4.1 Description of first aid measures				
General	<ul> <li>In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.</li> </ul>			
Eye contact	: Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.			
Inhalation	<ul> <li>Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.</li> </ul>			
Skin contact	: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.			
Ingestion	: If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.			
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.			

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

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting.

Date of issue/Date of revision	: 17/04/2018	Date of previous issue	: 2/05/2017	Version	:2	3/15
--------------------------------	--------------	------------------------	-------------	---------	----	------



Ardenbrite Metallic Paint

## **SECTION 4: First aid measures**

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Over-exposure signs/sy	nptoms
Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: No specific data.
4.3 Indication of any imn	nediate medical attention and special
Notes to physician	: Treat symptomatically. Contact

al treatment needed t poison treatment specialist immediately if large

- quantities have been ingested or inhaled.
- **Specific treatments** : No specific treatment.

See toxicological information (Section 11)

SECTION 5: Firefighting measures		
5.1 Extinguishing media         Suitable extinguishing         : Recommended: alcohol-resistant foam, CO <sub>2</sub> , powders, water spray.		
media Unsuitable extinguishing	: Do not use water jet.	

media

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

· · · · · · · · · · · · · · · · · · ·	
Hazards from the substance or mixture	: Highly flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide metal oxide/oxides
5.3 Advice for firefighters	
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
Additional information	: No unusual hazard if involved in a fire.

## **SECTION 6: Accidental release measures**

6.1 Personal precautions	, protective equipment and emergency procedures
For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.



Ardenbrite Metallic Paint

# **SECTION 6: Accidental release measures**

For emergency responders	:	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
6.2 Environmental precautions	:	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
6.3 Methods and material for o	co	ntainment and cleaning up
Small spill	:	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	:	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.
6.4 Reference to other sections	:	See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

# **SECTION 7: Handling and storage**

The information in this section contains generic advice and guidance.

7.1 Precautions for safe handling	<ul> <li>Prevent the creation of flammable or explosive concentrations of vapours in air and avoid vapour concentrations higher than the occupational exposure limits. In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. Mixture may charge electrostatically: always use earthing leads when transferring from one container to another.</li> <li>Operators should wear antistatic footwear and clothing and floors should be of the conducting type.</li> <li>Keep away from heat, sparks and flame. No sparking tools should be used. Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding.</li> <li>Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.</li> <li>Put on appropriate personal protective equipment (see Section 8). Never use pressure to empty. Container is not a pressure vessel.</li> <li>Always keep in containers made from the same material as the original one. Comply with the health and safety at work laws.</li> <li>Do not allow to enter drains or watercourses.</li> <li>Information on fire and explosion protection</li> <li>Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.</li> </ul>
	When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.
Date of issue/Date of revision	: 17/04/2018 Date of previous issue : 2/05/2017 Version : 2 5/15



Ardenbrite Metallic Paint

## SECTION 7: Handling and storage

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

Store in accordance with local regulations.

### Notes on joint storage

Keep away from: oxidising agents, strong alkalis, strong acids.

#### Additional information on storage conditions

Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

#### **Danger criteria**

	Notification and MAPP threshold	Safety report threshold
P5c	5000	50000

#### 7.3 Specific end use(s)

**Recommendations** 

: Not available. : Not available.

Industrial sector specific solutions

## SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

### 8.1 Control parameters

### **Occupational exposure limits**

Product/ingredient name	Exposure limit values
ethanol	EH40/2005 WELs (United Kingdom (UK), 12/2011). TWA: 1920 mg/m <sup>3</sup> 8 hours.
aluminium powder (stabilized)	TWA: 1000 ppm 8 hours. EH40/2005 WELs (United Kingdom (UK), 12/2011).
	TWA: 10 mg/m <sup>3</sup> 8 hours. Form: inhalable dust TWA: 4 mg/m <sup>3</sup> 8 hours. Form: respirable dust
4-hydroxy-4-methylpentan-2-one	EH40/2005 WELs (United Kingdom (UK), 12/2011). STEL: 362 mg/m <sup>3</sup> 15 minutes.
	STEL: 75 ppm 15 minutes. TWA: 241 mg/m <sup>3</sup> 8 hours. TWA: 50 ppm 8 hours.
methanol	EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin.
	STEL: 333 mg/m <sup>3</sup> 15 minutes. STEL: 250 ppm 15 minutes.
	TWA: 266 mg/m <sup>3</sup> 8 hours. TWA: 200 ppm 8 hours.
procedures atmosphere of the venti protective of the followin the assess limit values atmosphere of exposure (Workplace for the mea	Luct contains ingredients with exposure limits, personal, workplace re or biological monitoring may be required to determine the effectiveness illation or other control measures and/or the necessity to use respiratory equipment. Reference should be made to monitoring standards, such as ng: European Standard EN 689 (Workplace atmospheres - Guidance for sment of exposure by inhalation to chemical agents for comparison with s and measurement strategy) European Standard EN 14042 (Workplace res - Guide for the application and use of procedures for the assessment re to chemical and biological agents) European Standard EN 482 e atmospheres - General requirements for the performance of procedures asurement of chemical agents) Reference to national guidance s for methods for the determination of hazardous substances will also be
ate of issue/Date of revision : 17/04/2018	B Date of previous issue : 2/05/2017 Version : 2 6/15



Ardenbrite Metallic Paint

## **SECTION 8: Exposure controls/personal protection**

required.

#### **DNELs/DMELs**

No DNELs/DMELs available.

#### **PNECs**

No PNECs available

8.2 Exposure controls		
Appropriate engineering controls	:	Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn.
Individual protection measu	res	5
Hygiene measures	:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	-	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields. Recommended: safety glasses with side-shields. (EN 166)

### **Skin protection**

#### **Hand protection**

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

The breakthrough time must be greater than the end use time of the product.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.

Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

Gloves	: For prolonged or repeated handling, use the following type of gloves:
	Recommended: > 8 hours (breakthrough time): gloves : nitrile rubber (0.5mm) The recommendation for the type or types of glove to use when handling this product is based on information from the following source: EN 374-3 : 2003
	The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods. Recommended: Personnel should wear antistatic clothing made of natural fibres or of high-temperature-resistant synthetic fibres. (EN 1149-1)
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.



	Ardenbrite Metallic Paint	
	SECTION 8: Exposu	re controls/personal protection
-	<b>Respiratory protection</b>	: Based on the hazard and potential for exposure

Respiratory protection	:	Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: organic vapour (Type A) and particulate filter (EN 141)
Environmental exposure controls	-	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

# **SECTION 9: Physical and chemical properties**

9.1 Information on basic physical	l a	nd chemical properties
Appearance		
Physical state	:	Liquid.
Colour	:	Various
Odour	:	Alcohol-like.
Odour threshold	:	Not available.
рН	1	Not available.
Melting point/freezing point	:	Not available.
Initial boiling point and boiling range	1	Not available.
Flash point	:	Closed cup: 17,5°C
Evaporation rate	1	Not available.
Flammability (solid, gas)	:	Flammable in the presence of the following materials or conditions: open flames, sparks and static discharge, heat and shocks and mechanical impacts.
Upper/lower flammability or explosive limits	1	Not available.
Vapour pressure	1	Not available.
Vapour density	:	Not available.
Relative density	:	0,89 to 0,99
Solubility(ies)	:	Insoluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/ water	1	Not available.
Auto-ignition temperature	:	Not available.
Decomposition temperature	:	Not available.
Viscosity	1	Not available.
Explosive properties	:	Explosive in the presence of the following materials or conditions: open flames, sparks and static discharge, heat and shocks and mechanical impacts.
Oxidising properties	1	Not available.

## 9.2 Other information

No additional information.

## **SECTION 10: Stability and reactivity**

10.1 Reactivity	:	No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	:	Stable under recommended storage and handling conditions (see Section 7).
10.3 Possibility of hazardous reactions	:	Under normal conditions of storage and use, hazardous reactions will not occur.

Date of issue/Date of revision



9/15

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2016/918

etallic Paint
---------------

# **SECTION 10: Stability and reactivity**

10.4 Conditions to avoid	:	When exposed to high temperatures may produce hazardous decomposition products.
10.5 Incompatible materials	:	Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.
10.6 Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced. If involved in a fire, toxic gases including CO, CO2 and smoke can be generated.
		_

## **SECTION 11: Toxicological information**

### 11.1 Information on toxicological effects

## Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Naphtha (petroleum), hydrotreated heavy	LC50 Inhalation Vapour	Rat	8500 mg/m <sup>3</sup>	4 hours
5	LD50 Oral	Rat	>6 g/kg	-
4-hydroxy-4-methylpentan-	LD50 Dermal	Rabbit	13500 mg/kg	-
2-one				
	LD50 Oral	Rat	2520 mg/kg	-
methanol	LC50 Inhalation Gas.	Cat	23600 ppm	6 hours
	LC50 Inhalation Gas.	Rat	145000 ppm	1 hours
	LD50 Intraperitoneal	Rabbit	1826 mg/kg	-
	LD50 Oral	Mouse	5800 mg/kg	-

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Acute toxicity estimates

Not available.

## Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
4-hydroxy-4-methylpentan- 2-one	Eyes - Severe irritant	Rabbit	-	20 milligrams	-
	Eyes - Severe irritant	Rabbit	-	24 hours 100 microliters	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-
methanol	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	40 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-

Conclusion/Summary			
Skin	: Based on available data, the classification criteria are not met.		
Eyes	: Based on available data, the classification criteria are not met.		
Respiratory	: Based on available data, the classification criteria are not met.		
Sensitisation			
<b>Conclusion/Summary</b>			
Skin	: Based on available data, the classification criteria are not met.		
Respiratory	: Based on available data, the classification criteria are not met.		
Mutagenicity			
<b>Conclusion/Summary</b>	: Based on available data, the classification criteria are not met.		
Carcinogenicity			
Conclusion/Summary	: Based on available data, the classification criteria are not met.		
Date of issue/Date of revision	: 17/04/2018 Date of previous issue : 2/05/2017	Version	:2



Ardenbrite Metallic Paint

## **SECTION 11: Toxicological information**

### Reproductive toxicity

Conclusion/Summary

: Based on available data, the classification criteria are not met.

Teratogenicity

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
methanol	Category 1	Not determined	Not determined

Specific target organ toxicity (repeated exposure)

Not available.

**Aspiration hazard** 

Product/ingredient name	Result	
Naphtha (petroleum), hydrotreated heavy	ASPIRATION HAZARD - Category 1	

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Long term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health eff	ects
Not available.	
Conclusion/Summary	: Based on available data, the classification criteria are not met.
General	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
<b>Developmental effects</b>	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

**Other information** 

: Not available.

## **SECTION 12: Ecological information**

## 12.1 Toxicity

There are no data available on the mixture itself. Do not allow to enter drains or watercourses.

The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is not classified as hazardous to the environment.



Ardenbrite Metallic Paint

# **SECTION 12: Ecological information**

EC50 9000 mg/l C50 8630 mg/l C50 >5000 mg/l EC50 16,912 mg/l Marine water C50 3289 mg/l Fresh water	Species         Daphnia spec.         Fish         Fish         Algae - Ulva pertusa	Exposure 48 hours 96 hours 24 hours 96 hours
-C50 8630 mg/l -C50 >5000 mg/l EC50 16,912 mg/l Marine water	Fish Fish Algae - Ulva pertusa	96 hours 24 hours
C50 >5000 mg/l EC50 16,912 mg/l Marine water	Fish Algae - Ulva pertusa	24 hours
EC50 16,912 mg/l Marine water	Algae - Ulva pertusa	
		96 hours
C50 3289 mg/l Fresh water		
	Daphnia spec Daphnia magna - Neonate	48 hours
C50 1000 mg/l Fresh water	Fish - Lepomis macrochirus	96 hours
.C50 100 mg/l Fresh water	Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
C50 290 mg/l Fresh water	Fish - Danio rerio - Egg	96 hours
	-	Juvenile (Fledgling, Hatchling, Weanling)

## 12.2 Persistence and degradability

Conclusion/Summary	: This product has not been tested for biodegradation. Based on available data, the classification criteria are not met.		
Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
4-hydroxy-4-methylpentan- 2-one methanol	-	-	Readily
methanol	-	-	Readily

## 12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Naphtha (petroleum), hydrotreated heavy	-	10 to 2500	high
4-hydroxy-4-methylpentan- 2-one	-0.14 to 1.03	-	low
methanol	-0,77	<10	low

12.4 Mobility in soil	
Soil/water partition coefficient (Koc)	: Not available.
Mobility	: Volatile.

12.5 Results of PBT and vPvB assessment		
PBT	: Not applicable.	
vPvB	: Not applicable.	

**12.6 Other adverse effects** : No known significant effects or critical hazards.

## **SECTION 13: Disposal considerations**

The information in this section contains generic advice and guidance.

## 13.1 Waste treatment methods

Product

Date of issue/Date of revision



Ardenbrite Metallic Paint

# **SECTION 13: Disposal considerations**

Methods of disposal	:	The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non- recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.
Hazardous waste	1	Yes.
Disposal considerations	:	Do not allow to enter drains or watercourses. Dispose of according to all federal, state and local applicable regulations. If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

## European waste catalogue (EWC)

The European Waste Catalogue classification of this product, when disposed of as waste, is:

Waste code	Waste designation		
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances		
Packaging			
Methods of disposal	: The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.		
Disposal considerations	<ul> <li>Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned. Dispose of containers contaminated by the product in accordance with local or national legal provisions.</li> </ul>		
Special precautions	: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.		

ADR/RID	ADN	IMDG	IATA
UN1263	UN1263	UN1263	UN1263
Paint.	Paint.	Paint.	Paint.
3	3	3	3
11	II	II	11
No.	No.	No.	No.
	UN1263 Paint. 3	UN1263     UN1263       Paint.     Paint.       3     3       II     II	UN1263UN1263UN1263Paint.Paint.Paint.333IIIIII



Ardenbrite Metallic Paint

Additional	Remarks:	Emergency	Passenger and
information	$(\leq 5L:)$ Limited	schedules (EmS):	Cargo Aircraft
	Quantity - ADR/IMDG	F-E + <u>S-E</u>	Quantity limitation: 5 L
	3.4		Packaging
		Marine pollutant:	instructions: 353
	ADR Tunnel code: (D/	NO	Cargo Aircraft Only
	E)		Quantity limitation: 60
		Remarks:	L
		$(\leq 5L:)$ Limited	Packaging
		Quantity - ADR/IMDG	instructions: 364
		3.4.6	Limited Quantities -
			Passenger Aircraft
			Quantity limitation: 1 L
			Packaging
			instructions: Y 341

14.6 Special precautions for	: Transp
user	upright

**Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

## **SECTION 15: Regulatory information**

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
EU Regulation (EC) No. 1907/2006 (REACH)
Annex XIV - List of substances subject to authorisation
Annex XIV
None of the components are listed.
Substances of very high concern
None of the components are listed.
Annex XVII - Restrictions : Not applicable. on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles
Other EU regulations
VOC for Ready-for-Use : Exempt Mixture
Europe inventory : All components are listed or exempted.
Industrial emissions : Listed (integrated pollution prevention and control) - Air
Ozone depleting substances (1005/2009/EU) Not listed.
Prior Informed Consent (PIC) (649/2012/EU) Not listed.
Seveso Directive
This product is controlled under the Seveso Directive.  Danger criteria
Category
P5c

Date of issue/Date of revision



Ardenbrite Metallic Paint

ſ

# SECTION 15: Regulatory information

SECTION 15: Reg	ulatory information
	The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.
References	: EH40/2005 Workplace exposure limits Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2016/918
International regulation	S
Chemical Weapon Conv	vention List Schedules I, II & III Chemicals
Not listed.	
Montreal Protocol (Ann	exes A. B. C. E)
Not listed.	
	on Persistant Organia Ballutanta
	on Persistent Organic Pollutants
Not listed.	
	on Prior Informed Consent (PIC)
Not listed.	
UNECE Aarhus Protoco	I on POPs and Heavy Metals
Not listed.	
<b>CN code</b> : 3208 9	0.91
	-YGKT-R35N-E06V
International lists	
National inventory	
Australia	: All components are listed or exempted.
Canada	: All components are listed or exempted.
China	: All components are listed or exempted.
Japan	: Japan inventory (ENCS): Not determined.
	Japan inventory (ISHL): Not determined.
Malaysia	: Not determined.
New Zealand	: All components are listed or exempted.
Philippines	: All components are listed or exempted.
Republic of Korea	: All components are listed or exempted.
Taiwan	: All components are listed or exempted.
Turkey	: Not determined.
United States	: All components are listed or exempted.
15.2 Chemical safety assessment	: No Chemical Safety Assessment has been carried out.
SECTION 16: Othe	er information
Indicates information th	nat has changed from previously issued version.
Abbreviations and	: ATE = Acute Toxicity Estimate

Abbreviations and	: ATE = Acute Toxicity Estimate
acronyms	CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No.
-	1272/2008]
	DMEL = Derived Minimal Effect Level
	DNEL = Derived No Effect Level
	EUH statement = CLP-specific Hazard statement
	PBT = Persistent, Bioaccumulative and Toxic
	PNEC = Predicted No Effect Concentration
	RRN = REACH Registration Number
	vPvB = Very Persistent and Very Bioaccumulative



Ardenbrite Metallic Paint

## **SECTION 16: Other information**

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]		
Classification	Justification	
Flam. Liq. 2, H225	Expert judgment	

### Full text of H-phrases referred to in sections 2 and 3

Full text of abbreviated H statements	:	H225 H228 H261 H301 H304 H311 H319 H331 H370	Highly flammable liquid and vapour. Flammable solid. In contact with water releases flammable gases. Toxic if swallowed. May be fatal if swallowed and enters airways. Toxic in contact with skin. Causes serious eye irritation. Toxic if inhaled. Causes damage to organs.
Full text of classifications [CLP/GHS]	:	Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 3, H311 Asp. Tox. 1, H304 EUH066 Eye Irrit. 2, H319 Flam. Liq. 2, H225 Flam. Sol. 1, H228 STOT SE 1, H370 Water-react. 2, H261	ACUTE TOXICITY (oral) - Category 3 ACUTE TOXICITY (dermal) - Category 3 ACUTE TOXICITY (inhalation) - Category 3 ASPIRATION HAZARD - Category 1 Repeated exposure may cause skin dryness or cracking. SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 FLAMMABLE LIQUIDS - Category 2 FLAMMABLE SOLIDS - Category 1 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 1 SUBSTANCES AND MIXTURES WHICH IN CONTACT WITH WATER EMIT FLAMMABLE GASES - Category 2
Date of printing	:	17/04/2018	·
Date of issue/ Date of revision	:	17/04/2018	
Date of previous issue	:	2/05/2017	
Version	:	2	
Notice to reader			

The information in this Safety Data Sheet is based on the present state of knowledge and current legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications. The product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation.