



Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758

## SAFETY DATA SHEET

SN60 PB38 CU2 FLUITIN AS/133 1MM

FOR REGULATORY AND SDS QUESTIONS (EUROPE)

CALL THE PRODUCT STEWARDSHIP LINE

(ENGLISH SPEAKING ONLY)

+1-908-791-2336 (15:00 – 21:00 CET; MONDAY-FRIDAY)

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

#### 1.1 Product identifier

**Product name** : SN60 PB38 CU2 FLUITIN AS/133 1MM  
**Product code** : 53008

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

##### Identified uses

soldering  
Industrial applications.

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

**e-mail address of person responsible for this SDS** : Europeanregulatory@macdermid.com

**Supplier** : Fernox UK Ltd  
2 Genesis Business Park  
Albert Drive  
Sheerwater, Surrey  
Woking GU21 5RW

**Information contact** : Contact info: Tel: +44 (0) 330 100 7750  
e-mail: salesEU@AlphaAssembly.com

#### 1.4 Emergency telephone number

##### National advisory body/Poison Centre

**Telephone number** :

##### Supplier

**Telephone number** : Carechem24: (+44) 1865 407333; (+44) 1235 239 670 (across Europe)  
**Hours of operation** : 24/7

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Product definition** : Mixture

#### Classification according to UK CLP/GHS

Skin Sens. 1, H317

Repr. 1A, H360FD

Lact., H362

STOT RE 1, H372 (blood system, central nervous system (CNS), kidneys)

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 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.

### 2.2 Label elements

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : H317 - May cause an allergic skin reaction.  
H360FD - May damage fertility. May damage the unborn child.  
H362 - May cause harm to breast-fed children.  
H372 - Causes damage to organs through prolonged or repeated exposure. (blood system, central nervous system (CNS), kidneys)

#### Precautionary statements

**Prevention** : P201 - Obtain special instructions before use.  
P280 - Wear protective gloves: < 1 hour (breakthrough time): disposable vinyl. Wear protective clothing: Recommended: overall. Wear eye or face protection: Recommended: safety glasses with side-shields .  
P260 - Do not breathe dust.  
P263 - Avoid contact during pregnancy and while nursing.

**Response** : P308 + P313 - IF exposed or concerned: Get medical advice or attention.

**Storage** :

**Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazardous ingredients** : lead massive [particle diameter > 1 mm]  
rosin

**Supplemental label elements** : Not applicable.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Restricted to professional users.

#### Special packaging requirements

### 2.3 Other hazards

**Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII** : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

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

**SECTION 3: Composition/information on ingredients****3.2 Mixtures** : Mixture

Product/ingredient name	Identifiers	%	Classification	Type
tin	REACH #: 01-2119486474-28 EC: 231-141-8 CAS: 7440-31-5	≥50 - ≤75	Not classified.	[2]
lead massive [particle diameter > 1 mm]	REACH #: 01-2119513221-59 EC: 231-100-4 CAS: 7439-92-1 Index: 082-014-00-7	≥25 - ≤50	Repr. 1A, H360FD Lact., H362 STOT RE 1, H372 (blood system, central nervous system (CNS), kidneys) (oral, inhalation)	[1] [2]
rosin	EC: 232-475-7 CAS: 8050-09-7 Index: 650-015-00-7	≤5	Skin Sens. 1, H317	[1] [2]
copper	REACH #: 01-2119480154-42 EC: 231-159-6 CAS: 7440-50-8	≤3	Not classified.	[2]
			<b>See Section 16 for the full text of the H statements declared above.</b>	

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.

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

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

**SECTION 4: First aid measures****4.1 Description of first aid measures**

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

## SECTION 4: First aid measures

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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

#### Over-exposure signs/symptoms

**Eye contact** : No specific data.

**Inhalation** : Adverse symptoms may include the following:  
reduced foetal weight  
increase in foetal deaths  
skeletal malformations

**Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
reduced foetal weight  
increase in foetal deaths  
skeletal malformations

**Ingestion** : Adverse symptoms may include the following:  
reduced foetal weight  
increase in foetal deaths  
skeletal malformations

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

**Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments** : No specific treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** : None known.

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

**Hazards from the substance or mixture** : No specific fire or explosion hazard.

**Hazardous combustion 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.

**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.

## 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. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- 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 containment and cleaning up

- Small spill** : Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

- 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. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid contact during pregnancy or while nursing. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

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

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

### 7.3 Specific end use(s)

## SECTION 7: Handling and storage

**Recommendations** : No specific measures identified.

**Industrial sector specific solutions** : No specific measures identified.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

Product/ingredient name	Exposure limit values
tin	<b>EH40/2005 WELs (United Kingdom (UK), 2002).</b> TWA: 2 mg/m <sup>3</sup> 8 hours. STEL: 4 mg/m <sup>3</sup> 15 minutes.
lead massive [particle diameter > 1 mm]	<b>EH40/2005 WELs (United Kingdom (UK), 1/2020).</b> TWA: 0.15 mg/m <sup>3</sup> 8 hours.
rosin	<b>EH40/2005 WELs (United Kingdom (UK), 1/2020). Inhalation sensitiser.</b> STEL: 0.15 mg/m <sup>3</sup> 15 minutes. Form: Fume TWA: 0.05 mg/m <sup>3</sup> 8 hours. Form: Fume
copper	<b>EH40/2005 WELs (United Kingdom (UK), 1/2020). Notes: as Cu</b> TWA: 0.2 mg/m <sup>3</sup> , (as Cu) 8 hours. Form: Fume

**Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

#### EU DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
tin	DNEL	Long term Oral	5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	10 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	17 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Inhalation	71 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	80 mg/kg bw/day	General population	Systemic
rosin	DNEL	Long term Oral	1.0655 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	1.0655 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	2.131 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	10 mg/m <sup>3</sup>	Workers	Local
copper	DNEL	Long term Oral	0.041 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	1 mg/m <sup>3</sup>	General population	Local
	DNEL	Long term Inhalation	1 mg/m <sup>3</sup>	General population	Local
	DNEL	Long term Dermal	137 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	137 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Dermal	273 mg/kg bw/day	General population	Systemic
DNEL	Short term Dermal	273 mg/kg bw/day	Workers	Systemic	

## SECTION 8: Exposure controls/personal protection

### EU PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
rosin	Fresh water	2 µg/l	Assessment Factors
	Sewage Treatment Plant	1000 mg/l	Assessment Factors
	Fresh water sediment	7 µg/kg dwt	Equilibrium Partitioning
	Marine water sediment	1 µg/kg dwt	Equilibrium Partitioning

### 8.2 Exposure controls

**Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

#### Individual protection measures

**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. Contaminated work clothing should not be allowed out of the workplace. 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

#### Skin protection

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. < 1 hour (breakthrough time): disposable vinyl

**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. Recommended: overall

**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.

**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: Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**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

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### 9.1 Information on basic physical and chemical properties

#### Appearance

**Physical state** : Solid.

**Colour** : Silvery.

## SECTION 9: Physical and chemical properties

<b>Odour</b>	: Sweetish.
<b>Odour threshold</b>	: There are no data available on the mixture itself.
<b>Melting point/freezing point</b>	: 183 to 190°C
<b>Initial boiling point and boiling range</b>	: Not available.
<b>Flammability (solid, gas)</b>	: There are no data available on the mixture itself.
<b>Upper/lower flammability or explosive limits</b>	: Not applicable.
<b>Flash point</b>	: Not applicable.
<b>Auto-ignition temperature</b>	: Not applicable.
<b>Decomposition temperature</b>	: There are no data available on the mixture itself.
<b>pH</b>	: Testing not technically possible.
<b>Viscosity</b>	: Testing not technically possible.
<b>Solubility(ies)</b>	:

Media	Result
cold water	Very slightly soluble
hot water	Very slightly soluble

<b>Solubility in water</b>	: There are no data available on the mixture itself.
<b>Partition coefficient: n-octanol/ water</b>	: Not applicable.
<b>Vapour pressure</b>	: Not available.
<b>Evaporation rate</b>	: There are no data available on the mixture itself.
<b>Relative density</b>	: There are no data available on the mixture itself.
<b>Density</b>	: 7.9 g/cm <sup>3</sup> [20°C (68°F)]
<b>Vapour density</b>	: Not relevant/applicable due to nature of the product.
<b>Explosive properties</b>	: There are no data available on the mixture itself.
<b>Oxidising properties</b>	: There are no data available on the mixture itself.
<b>Particle characteristics</b>	
<b>Median particle size</b>	: Not relevant/applicable due to nature of the product.

### 9.2 Other information

<b>SAPT</b>	: Not relevant/applicable due to nature of the product.
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## SECTION 10: Stability and reactivity

<b>10.1 Reactivity</b>	: Not available.
<b>10.2 Chemical stability</b>	: The product is stable.
<b>10.3 Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous reactions will not occur.
<b>10.4 Conditions to avoid</b>	: No specific data.
<b>10.5 Incompatible materials</b>	: No specific data.
<b>10.6 Hazardous decomposition products</b>	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**SECTION 11: Toxicological information****11.1 Information on toxicological effects****Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
rosin	LD50 Oral	Rat	7600 mg/kg	-

**Conclusion/Summary** : Not tested

**Acute toxicity estimates**

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
rosin	7600	N/A	N/A	N/A	N/A

**Irritation/Corrosion****Conclusion/Summary**

**Skin** : Not tested

**Eyes** : Not tested

**Respiratory** : Not tested

**Sensitisation****Conclusion/Summary**

**Skin** : Not tested

**Respiratory** : Not tested

**Mutagenicity**

**Conclusion/Summary** : Not tested

**Carcinogenicity**

**Conclusion/Summary** : Not tested

**Reproductive toxicity**

**Conclusion/Summary** : Not tested

**Teratogenicity**

**Conclusion/Summary** : Not tested

**Specific target organ toxicity (single exposure)**

Not available.

**Specific target organ toxicity (repeated exposure)**

Product/ingredient name	Category	Route of exposure	Target organs
lead massive [particle diameter > 1 mm]	Category 1	oral, inhalation	blood system, central nervous system (CNS), kidneys

**Aspiration hazard**

Not available.

**Information on likely routes of exposure** : Not tested

**Potential acute health effects**

**Eye contact** : No known significant effects or critical hazards.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : May cause an allergic skin reaction.

**Ingestion** : No known significant effects or critical hazards.

**SECTION 11: Toxicological information****Symptoms related to the physical, chemical and toxicological characteristics**

- Eye contact** : No specific data.
- Inhalation** : Adverse symptoms may include the following:  
reduced foetal weight  
increase in foetal deaths  
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
reduced foetal weight  
increase in foetal deaths  
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:  
reduced foetal weight  
increase in foetal deaths  
skeletal malformations

**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 effects**

Not available.

- Conclusion/Summary** : Not available.
- General** : Causes damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Reproductive toxicity** : May damage fertility. May damage the unborn child. May cause harm to breast-fed children.

- Other information** : No known significant effects or critical hazards.

**SECTION 12: Ecological information****12.1 Toxicity**

Product/ingredient name	Result	Species	Exposure
lead massive [particle diameter > 1 mm]	Acute EC50 105 ppb Marine water	Algae - Diatom - Chaetoceros sp. - Exponential growth phase	72 hours
	Acute EC50 0.489 mg/l Marine water	Algae - Green algae - Ulva pertusa	96 hours
	Acute EC50 8000 µg/l Fresh water	Aquatic plants - Duckweed - Lemna minor	4 days
	Acute LC50 530 µg/l Fresh water	Crustaceans - Water flea - Ceriodaphnia reticulata	48 hours
	Acute LC50 0.594 mg/l Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	Acute LC50 0.44 ppm Fresh water	Fish - common carp - Cyprinus carpio - Juvenile (Fledgling, Hatchling, Weanling)	96 hours

## SECTION 12: Ecological information

copper	Chronic NOEC 0.25 mg/l Marine water	Algae - Green algae - Ulva pertusa	96 hours
	Chronic NOEC 17 µg/l Fresh water	Fish - common carp - Cyprinus carpio	4 weeks
	Acute EC50 21 µg/l Marine water	Algae - Diatom - Nitzschia closterium - Exponential growth phase	72 hours
	Acute EC50 1100 µg/l Fresh water	Aquatic plants - Duckweed - Lemna minor	4 days
	Acute EC50 1.7 µg/l Fresh water	Crustaceans - Water flea - Ceriodaphnia pulchella - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Acute IC50 5.4 mg/l Marine water	Aquatic plants - Plant Kingdom - Plantae - Exponential growth phase	72 hours
	Acute LC50 3.1 µg/l Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	Chronic EC10 0.032 mg/l Marine water	Algae - Green algae - Ulva pertusa	4 days
	Chronic NOEC 7 mg/l Fresh water	Aquatic plants - Coontail - Ceratophyllum demersum	3 days
Chronic NOEC 5 µg/l Fresh water	Daphnia - Water flea - Daphnia pulex - Neonate	21 days	

**Conclusion/Summary** : Ecological testing has not been conducted on this product.

### 12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
rosin	-	80 % - Readily - 28 days	-	-

**Conclusion/Summary** : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
rosin	-	-	Readily

### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
rosin	1.9 to 7.7	-	high

### 12.4 Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Mobility** : Not available.

### 12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**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. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 13.1 Waste treatment methods

#### Product

**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** : Yes.

#### Waste catalogue

Waste code	Waste designation
10 08 11	dross and skimmings other than those mentioned in 10 08 10

#### 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.

**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. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14: Transport information

	ADR/RID	IMDG	IATA
<b>14.1 UN number</b>	Not regulated.	Not regulated.	Not regulated.
<b>14.2 UN proper shipping name</b>	-	-	-
<b>14.3 Transport hazard class(es)</b>	-	-	-
<b>14.4 Packing group</b>	-	-	-
<b>14.5 Environmental hazards</b>	No.	No.	No.

#### Additional information

**IATA** : The environmentally hazardous substance mark may appear if required by other transportation regulations.

**14.6 Special precautions for user** : **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.

**14.7 Transport in bulk according to IMO instruments** : Not applicable - not transported in bulk

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****UK (GB) /REACH****Annex XIV - List of substances subject to authorisation****Annex XIV**

None of the components are listed.

**Substances of very high concern**

Intrinsic property	Ingredient name	Status	Reference number	Date of revision
Toxic to reproduction	lead	Candidate	-	27-Jun-18

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Restricted to professional users.

**National regulations**

Product/ingredient name	List name	Name on list	Classification	Notes
lead massive [particle diameter > 1 mm]	UK Occupational Exposure Limits EH40 - WEL	lead	Carc.	-

**EU regulations**

**Industrial emissions (integrated pollution prevention and control) - Air** : Listed

**Industrial emissions (integrated pollution prevention and control) - Water** : Listed

**15.2 Chemical safety assessment** : This product contains substances for which Chemical Safety Assessments are still required.

**SECTION 16: Other information**

🔍 Indicates information that has changed from previously issued version.

**Abbreviations and acronyms** :

- ATE = Acute Toxicity Estimate
- GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019 No. 720 and amendments
- DMEL = Derived Minimal Effect Level
- DNEL = Derived No Effect Level
- EUH statement = GB CLP-specific Hazard statement
- N/A = Not available
- PBT = Persistent, Bioaccumulative and Toxic
- PNEC = Predicted No Effect Concentration
- RRN = REACH Registration Number
- SGG = Segregation Group
- vPvB = Very Persistent and Very Bioaccumulative

**Procedure used to derive the classification**

**SECTION 16: Other information**

Classification	Justification
Skin Sens. 1, H317 Repr. 1A, H360FD Lact., H362 STOT RE 1, H372 (blood system, central nervous system (CNS), kidneys)	Calculation method Calculation method Calculation method Calculation method

**Full text of abbreviated H statements**

H317	May cause an allergic skin reaction.
H360FD	May damage fertility. May damage the unborn child.
H362	May cause harm to breast-fed children.
H372	Causes damage to organs through prolonged or repeated exposure.

**Full text of classifications**

Lact.	REPRODUCTIVE TOXICITY - Effects on or via lactation
Repr. 1A	REPRODUCTIVE TOXICITY - Category 1A
Skin Sens. 1	SKIN SENSITISATION - Category 1
STOT RE 1	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 1

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