

**SAFETY DATA SHEET**

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

**EASY-FLO™ Flux Powder**

**Version** : 1  
**Date of issue/ Date of revision** : 31/08/2022  
**Date of previous issue** : No previous validation

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

**Product name** EASY-FLO™ Flux Powder  
**EC number** : 948-045-3  
**REACH Registration number**

Registration number	Legal entity
01-2120790432-54-0000	-

**CAS number** : Not available.  
**Product type** : Powder.

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

**Specific uses** : Brazing. Flux agent.

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

**Supplier** : Johnson Matthey Plc,  
Gate 11, Orchard Road,  
Royston,  
Herts SG8 5HE  
United Kingdom  
+44 (0) 1763 253000  
**e-mail address of person responsible for this SDS** : mj@matthey.com

**1.4 Emergency telephone number**

**Telephone number** : +44 (0)1763 253000  
**Hours of operation** : 24 hours

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Product definition** : UVCB

**Classification according to UK CLP/GHS**

Acute Tox. 4, H302

Repr. 2, H361d (oral)

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** : Warning

**Hazard statements** : Harmful if swallowed.  
Suspected of damaging the unborn child. (oral)

**Precautionary statements**

**Prevention** : Obtain special instructions before use. Wear protective gloves, protective clothing, eye protection, face protection, or hearing protection. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

**Response** : IF exposed or concerned: Get medical advice or attention.

**Storage** : Not applicable.

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

**Supplemental label elements** : Not applicable.

**Annex XVII -** : Not applicable.

**Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles**

**Special packaging requirements**

**Containers to be fitted with child-resistant fastenings** : Not applicable.

**Tactile warning of danger** : Not applicable.

### 2.3 Other hazards

**Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII** :

	PBT	P	B	T	vPvB	vP	vB
	Not applicable (Inorganic)	N/A	N/A	N/A	Not applicable (Inorganic)	N/A	N/A

**SECTION 2: Hazards identification**

**Other hazards which do not result in classification** : Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.

**SECTION 3: Composition/information on ingredients****3.1 Substances** : UVCB

Product/ingredient name	Identifiers	%	Classification	Type
Reaction product of mixed inorganic base and acid resulting in dipotassium hydroxytetrafluoro triborontrioxide, potassium trihydroxy fluoroborate, dipotassium tetrahydroxy tetraboronpentaoxide dehydrate in powder form	REACH #: 01-2120790432-54 EC: 948-045-3	100	Acute Tox. 4, H302 Repr. 2, H361d (oral)  <b>See Section 16 for the full text of the H statements declared above.</b>	[1]

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

Type

[1] Constituent

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 if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Move affected person to fresh air. 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** : Flush contaminated skin with plenty of water. In case of burns, immediately cool affected skin with cold water and continue for as long as possible or apply wet cloths to the area until medical attention can be obtained. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**SECTION 4: First aid measures**

- 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. If necessary, call a poison center or physician. 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.
- 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****Over-exposure signs/symptoms**

- Eye contact** : Adverse symptoms may include the following:  
irritation  
redness
- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing
- Skin contact** : No specific data.
- 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:  
halogenated compounds  
hydrogen fluoride  
metal oxide/oxides

**5.3 Advice for firefighters**

## SECTION 5: Firefighting measures

- 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.
- Not explosive.  
Non-flammable.

## 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. Avoid breathing dust. 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

- 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** : Stop leak if without risk. 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. Avoid creating dusty conditions and prevent wind dispersal. 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

### 7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe fumes or vapours released when the product is heated. Do not ingest. Avoid breathing dust. 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)

- Recommendations** : Not available.
- Industrial sector specific solutions** : Not available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

Product/ingredient name	Exposure limit values
Reaction product of mixed inorganic base and acid resulting in dipotassium hydroxytetrafluoro triborontrioxide, potassium trihydroxy fluoroborate, dipotassium tetrahydroxy tetraboronpentaoxide dehydrate in powder form	<b>EH40/2005 WELs (United Kingdom (UK), 1/2020). [Fluorides (inorganic)]</b> TWA: 2.5 mg/m <sup>3</sup> , (as F) 8 hours.

#### Biological exposure indices

No exposure indices known.

- Recommended monitoring procedures** : 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.

#### DNELs/DMELs

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

Product/ingredient name	Type	Exposure	Value	Population	Effects
Reaction product of mixed inorganic base and acid resulting in dipotassium hydroxytetrafluoro triborontrioxide, potassium trihydroxy fluoroborate, dipotassium tetrahydroxy tetraboronpentaoxide dehydrate in powder form	DNEL	Long term Inhalation	7.8 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Inhalation	13.6 mg/m <sup>3</sup>	Workers	Local
	DNEL	Short term Inhalation	13.6 mg/m <sup>3</sup>	Workers	Local
	DNEL	Long term Dermal	367.7 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	3.9 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Inhalation	13.6 mg/m <sup>3</sup>	General population	Local
	DNEL	Short term Inhalation	13.6 mg/m <sup>3</sup>	General population	Local
	DNEL	Long term Dermal	185.6 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	0.92 mg/kg bw/day	General population	Systemic
	DNEL	Short term Oral	0.92 mg/kg bw/day	General population	Systemic

**PNECs**

Product/ingredient name	Compartment Detail	Value	Method Detail
Reaction product of mixed inorganic base and acid resulting in dipotassium hydroxytetrafluoro triborontrioxide, potassium trihydroxy fluoroborate, dipotassium tetrahydroxy tetraboronpentaoxide dehydrate in powder form	Fresh water	2.02 mg/l	Sensitivity Distribution
	Sewage Treatment Plant	10 mg/l	Assessment Factors
	Soil	5.4 mg/kg dwt	Sensitivity Distribution

**8.2 Exposure controls****Appropriate****engineering controls**

- : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Fume extraction should take place as close as possible to the source of emission.

**SECTION 8: Exposure controls/personal protection****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. 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. If operating conditions cause high dust concentrations to be produced, use dust goggles. Recommended: EN 166 or local equivalent. Wear eye protection with filtered lenses compliant with EN 169 (or local equivalent) when carrying out brazing work.
- 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. Recommended: EN 374 or local equivalent. 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.
- 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.
- 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** : In case of inadequate ventilation wear 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: inorganic gases/vapours filter (Type B) or acid gas filter (Type E) (EN 14387 or local equivalent) and particulate filter (EN 143 or 149, Type P3 or FFP3, Associated Protection Factor (APF) = 20) or local equivalent as a minimum)
- Thermal hazards** : When handling hot material, wear heat-resistant protective gloves that are able to withstand the temperature of molten product (EN 407 or local equivalent).
- 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

<b>Physical state</b>	: Solid. [Powder.]
<b>Colour</b>	: White.
<b>Odour</b>	: Odourless.
<b>Odour threshold</b>	: Not applicable.
<b>Melting point/freezing point</b>	: Decomposes
<b>Initial boiling point and boiling range</b>	: Decomposes
<b>Flammability (solid, gas)</b>	: Non-flammable.
<b>Upper/lower flammability or explosive limits</b>	: Not applicable.
<b>Flash point</b>	: Not applicable.
<b>Auto-ignition temperature</b>	: >850°C (>1562°F)
<b>Decomposition temperature</b>	: 147°C
<b>pH</b>	: 8
<b>Viscosity</b>	: Not applicable.
<b>Solubility(ies)</b>	:

Media	Result
cold water	Partially soluble

<b>Solubility in water</b>	: <1.82 g/l
<b>Partition coefficient: n-octanol/water</b>	: Not applicable.
<b>Vapour pressure</b>	: Not applicable.
<b>Relative density</b>	: 2.036
<b>Density</b>	: 2.036 g/cm <sup>3</sup> [20°C (68°F)]
<b>Vapour density</b>	: Not applicable.
<b>Explosive properties</b>	: Not explosive.
<b>Oxidising properties</b>	: Not available.
<b>Particle characteristics</b>	
<b>Median particle size</b>	: Not available.

## 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

The product is stable.

### 10.3 Possibility of hazardous reactions

**SECTION 10: Stability and reactivity**

May react with reducing agents, evolving extremely flammable hydrogen gas.

**10.4 Conditions to avoid**

No specific data.

**10.5 Incompatible materials**

reducing agents

**10.6 Hazardous decomposition products**

Emits acrid smoke and fumes when heated to decomposition. metal oxide/oxides. halogenated compounds. hydrogen fluoride. May react with reducing agents, evolving extremely flammable hydrogen gas.

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

Product/ingredient name	Result	Species	Dose	Exposure
Reaction product of mixed inorganic base and acid resulting in dipotassium hydroxytetrafluoro triborontrioxide, potassium trihydroxy fluoroborate, dipotassium tetrahydroxy tetraboronpentaoxide dehydrate in powder form	LC50 Inhalation Dusts and mists	Rat - Male, Female	>2.04 mg/l	4 hours
	LD50 Dermal	Rabbit - Male, Female	>2000 mg/kg	-

**Conclusion/Summary** : Harmful if swallowed.

**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)
Reaction product of mixed inorganic base and acid resulting in dipotassium hydroxytetrafluoro triborontrioxide, potassium trihydroxy fluoroborate, dipotassium tetrahydroxy tetraboronpentaoxide dehydrate in powder form	500	N/A	N/A	N/A	N/A

**Irritation/Corrosion**

**SECTION 11: Toxicological information**

Product/ingredient name	Result	Species	Score	Exposure	Observation
Reaction product of mixed inorganic base and acid resulting in dipotassium hydroxytetrafluoro triborontrioxide, potassium trihydroxy fluoroborate, dipotassium tetrahydroxy tetraboronpentaoxide dehydrate in powder form	Eyes - Not irritant	Cat	0 to 1	24 hours	72 hours
	Skin - Not irritant	Rabbit	0	4 hours	48 hours

**Conclusion/Summary****Skin** : Not classified.**Eyes** : Not classified.**Respiratory** : Not classified. Based on available data, the classification criteria are not met.**Sensitisation**

Product/ingredient name	Route of exposure	Species	Result
Reaction product of mixed inorganic base and acid resulting in dipotassium hydroxytetrafluoro triborontrioxide, potassium trihydroxy fluoroborate, dipotassium tetrahydroxy tetraboronpentaoxide dehydrate in powder form	skin	Guinea pig	Not sensitizing

**Conclusion/Summary****Skin** : Not classified.**Respiratory** : Not classified. To the best of our knowledge, the toxicological properties of this substance have not been thoroughly investigated.**Mutagenicity**

Product/ingredient name	Test	Experiment	Result
Reaction product of mixed inorganic base and acid resulting in dipotassium hydroxytetrafluoro triborontrioxide, potassium trihydroxy fluoroborate, dipotassium tetrahydroxy	OECD 471 Bacterial Reverse Mutation Test	Experiment: In vitro Subject: Bacteria	Negative

**SECTION 11: Toxicological information**

tetraboronpentaoxide dehydrate in powder form	OECD 476 In vitro Mammalian Cell Gene Mutation Test NTP	Experiment: In vitro Subject: Mammalian-Animal	Negative
	OECD 474 Mammalian Erythrocyte Micronucleus Test	Experiment: In vitro Subject: Mammalian-Animal	Negative
		Experiment: In vivo Subject: Mammalian-Animal Cell: Somatic	Negative

**Conclusion/Summary** : Not classified.

**Carcinogenicity**

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

**Reproductive toxicity**

**Conclusion/Summary** : Suspected of damaging the unborn child if swallowed.

**Teratogenicity**

**Conclusion/Summary** : Not applicable.

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

Not available.

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

Not available.

**Aspiration hazard**

Product/ingredient name	Result
Not available.	

**Information on likely routes of exposure** : Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

**Potential acute health effects**

- Eye contact** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
- Inhalation** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs. Emits acid smoke and fumes when heated to decomposition.
- Skin contact** : Contact with hot material causes thermal skin burns.
- Ingestion** : Harmful if swallowed.

**Symptoms related to the physical, chemical and toxicological characteristics**

- Eye contact** : Adverse symptoms may include the following:  
irritation  
redness

**SECTION 11: Toxicological information**

- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing
- Skin contact** : No specific data.
- 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** : Harmful if swallowed. Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.

- Potential delayed effects** : Suspected of damaging the unborn child if swallowed.

**Long term exposure**

- Potential immediate effects** : Suspected of damaging the unborn child if swallowed.

- Potential delayed effects** : Suspected of damaging the unborn child if swallowed.

**Potential chronic health effects**

- Conclusion/Summary** : Not classified.

- General** : Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

- Carcinogenicity** : No known significant effects or critical hazards.

- Mutagenicity** : No known significant effects or critical hazards.

- Reproductive toxicity** : Suspected of damaging the unborn child. (oral)

- Other information** : Not available.

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

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

Product/ingredient name	Result	Species	Exposure
Reaction product of mixed inorganic base and acid resulting in dipotassium hydroxytetrafluoro triborontrioxide, potassium trihydroxy fluoroborate, dipotassium tetrahydroxy tetraboronpentaoxide dehydrate in powder	Acute LC50 25.05 to 80.06 mg/l Marine water	Crustaceans - Litopenaeus vannamei	96 hours

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

## SECTION 12: Ecological information

form	Acute LC50 133 mg/l Fresh water Acute LC50 74 mg/l Marine water	Daphnia - Daphnia magna Fish - Limanda limanda	48 hours 96 hours
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**Conclusion/Summary** : Not classified.

## 12.2 Persistence and degradability

**Conclusion/Summary** : The methods for determining the biological degradability are not applicable to inorganic substances.

## 12.3 Bioaccumulative potential

Not available.

## 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

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
Reaction product of mixed inorganic base and acid resulting in dipotassium hydroxytetrafluoro triborontrioxide, potassium trihydroxy fluoroborate, dipotassium tetrahydroxy tetraboronpentaoxide dehydrate in powder form	Not applicable (Inorganic)	N/A	N/A	N/A	Not applicable (Inorganic)	N/A	N/A

## 12.6 Other adverse effects

No known significant effects or critical hazards.

## SECTION 13: Disposal considerations

## 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.

**SECTION 13: Disposal considerations**

- Hazardous waste** : The classification of the product may meet the criteria for a hazardous waste.
- 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**

	<b>ADR/RID</b>	<b>ADN</b>	<b>IMDG</b>	<b>IATA</b>
<b>14.1 UN number</b>	Not regulated.	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.	No.

- 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 Maritime transport in bulk according to IMO instruments** : Not available.

**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**

None of the components are listed.

## SECTION 15: Regulatory information

### Ozone depleting substances

Not listed.

### Prior Informed Consent (PIC)

Not listed.

### Persistent Organic Pollutants

Not listed.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Not applicable.

### Seveso Directive

This product is not controlled under the Seveso Directive.

### EU regulations

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

**Industrial emissions (integrated pollution prevention and control) - Water** : Not listed

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### Inventory list

**Australia** : This material is listed or exempted.  
**Canada** : This material is not listed.  
**China** : This material is not listed.  
**Eurasian Economic Union** : **Russian Federation inventory**: This material is not listed.  
**Japan** : **Japan inventory (CSCL)**: This material is not listed.  
**Japan inventory (ISHL)**: This material is not listed.  
**New Zealand** : This material is not listed.

**SECTION 15: Regulatory information**

<b>Philippines</b>	: This material is not listed.
<b>Republic of Korea</b>	: This material is not listed.
<b>Taiwan</b>	: This material is not listed.
<b>Thailand</b>	: This material is not listed.
<b>Turkey</b>	: This material is not listed.
<b>United States</b>	: This material is not listed.
<b>Viet Nam</b>	: This material is not listed.

**15.2 Chemical safety assessment** : Not available.

**SECTION 16: Other information**

▲ Indicates information that has changed from previously issued version.

<b>Abbreviations and acronyms</b>	: 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
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**Procedure used to derive the classification**

Classification	Justification
Acute Tox. 4, H302 Repr. 2, H361d (oral)	Expert judgment Expert judgment

**Full text of abbreviated H statements**

H302	Harmful if swallowed.
H361d	Suspected of damaging the unborn child.

**Full text of classifications**

Acute Tox. 4	ACUTE TOXICITY - Category 4
Repr. 2	REPRODUCTIVE TOXICITY - Category 2

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**SECTION 16: Other information**