

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

1.1. Product identifier

Product form : Substance (UVCB)
Name : SuperFlux NT-NT2-AgFlux NT
Trade name : 4032- SuperFlux NT-NT2-AgFlux NT
Chemical name : Reaction product of mixed inorganic base and acid resulting in potassium trihydroxy fluoroborate, dipotassium tetrahydroxy tetraboronpentaoxide dehydrate, potassium tetrafluoroborate in powder form
UFI : 09V2-Q0HC-0002-3RR0
EC-No. : 948-039-0
REACH registration No. : 01-2120790331-58

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Deoxidising flux recommended for soldering processes

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Alliages Industries
rue Gutenberg 8 bis
91070 Z.I. La Marinière Bondoufle
T +33 1.69.11.50.50, F 33 1.69.11.50.51
contact@brasage.com, [HTTP://WWW.BRASAGE.COM](http://www.brasage.com)

1.4. Emergency telephone number

Country/Area	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
Malta	Medicines & Poisons Info Office	Mater Dei Hospital Msida MSD 2090 Msida	+356 2545 6508	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Acute Tox. 4 (Oral) H302
Repr. 2 H361d

Full text of hazard classes, H- and EUH-statements: see section 16

Specific concentration limits (%):
(6.8 ≤ C < 100)

Repr. 2, H361d

Adverse physicochemical, human health and environmental effects

Harmful if swallowed. Suspected of damaging the unborn child.

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2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



Signal word (CLP)

Hazard statements (CLP)

Precautionary statements (CLP)

: Warning
: H302 - Harmful if swallowed.
: H361d - Suspected of damaging the unborn child.
: P201 - Obtain special instructions before use.
: P264 - Wash hands, forearms and face thoroughly after handling.
: P280 - Wear protective gloves, protective clothing, face protection.
: P308+P313 - IF exposed or concerned: Get medical advice.

2.3. Other hazards

Other hazards which do not result in classification : During brazing operations : Inhalation of fumes may cause metal fume fever, Inhalation of fumes or vapours may cause respiratory irritation. During combustion : Release of poisonous gasHydrogen fluoride.

To our knowledge, contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

Component	
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	Potassium tetrafluoroborate (14075-53-7), boric acid (10043-35-3) ⁽¹⁾
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	Potassium tetrafluoroborate (14075-53-7), boric acid (10043-35-3) ⁽¹⁾

⁽¹⁾ Substance(s) in concentration below 0.1 % and displayed on a voluntary basis

Component	
Substance(s) not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605	Potassium tetrafluoroborate (14075-53-7), boric acid (10043-35-3) ⁽¹⁾

⁽¹⁾ Substance(s) in concentration below 0.1 % and displayed on a voluntary basis

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : UVCB
Name : SuperFlux NT-NT2-AgFlux NT
EC-No. : 948-039-0

Name	Product identifier	%
Orthoboric acid, compound with potassium fluoride (1:1)	CAS-No.: 77816-14-9 EC-No.: 278-772-5	52 – 60
Potassium tetrafluoroborate	CAS-No.: 14075-53-7 EC-No.: 237-928-2 REACH-no: 01-2119968922-24	20 – 26

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Name	Product identifier	%
dipotassium tetrahydroxy tetraboronpentaoxide dehydrate	-	15 – 25
boric acid substance listed as REACH Candidate	CAS-No.: 10043-35-3 EC-No.: 233-139-2 EC Index-No.: 005-007-00-2 REACH-no: 01-2119486683-25	≤ 0.09

Full text of H- and EUH-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: In all cases of doubt, or when symptoms persist, seek medical attention. If possible show him this sheet. Failing this, show him the packaging or label.
First-aid measures after inhalation	: If experiencing respiratory symptoms: Seek medical attention immediately. Move the affected person to the fresh air.
First-aid measures after skin contact	: Rinse immediately with plenty of water.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophtalmologist if irritation persists.
First-aid measures after ingestion	: Call a doctor immediately, even if there are no immediate symptoms.

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

Symptoms/effects after skin contact	: Risk of thermal burns on contact with molten product.
Symptoms/effects after ingestion	: Harmful if swallowed. Suspected of damaging the unborn child.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Carbon dioxide (CO2). Chemical powder. Alcohol resistant foam. Water spray.
Unsuitable extinguishing media	: Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Not flammable. Not combustible.
Hazardous decomposition products in case of fire	: Hydrogen fluoride.

5.3. Advice for firefighters

Firefighting instructions	: Fight fire from safe distance and protected location.
Protection during firefighting	: Wear suitable protective clothing. Self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Ventilate area.
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6.1.1. For non-emergency personnel

Protective equipment	: Only qualified personnel equipped with suitable protective equipment may intervene.
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6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment.

6.2. Environmental precautions

Contain the spilled material by bunding.

6.3. Methods and material for containment and cleaning up

For containment : Mechanically recover the product.
Methods for cleaning up : Wash non-recoverable remainder with large amounts of water.

6.4. Reference to other sections

For waste disposal after cleaning, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Handle in accordance with good industrial hygiene and safety practice. Provide local exhaust or general room ventilation. Do not expose pregnant or breastfeeding women. Do not breathe dust. Do not breathe fumes. Extraction to remove smokes at its source.
Hygiene measures : Do not drink, eat or smoke in the workplace. Always wash your hands immediately after handling this product, and once again before leaving the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Store in a dry, cool and well-ventilated place. Store locked up.
Incompatible materials : Strong reducing agents.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

boric acid (10043-35-3)	
Ireland - Occupational Exposure Limits	
Local name	Borate compounds inorganic: Boric acid
OEL TWA	2 mg/m ³
Remark	Repr.1B (Substances which are presumed human reproductive toxicants)
Regulatory reference	Chemical Agents Code of Practice 2021

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

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8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Extraction to remove smokes at its source. Measures in case of dust release.

8.2.2. Personal protection equipment

8.2.2.1. Eye and face protection

Eye protection:

If dust are formed : Safety glasses with side shields, (ISO 16321-1)

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Waterproof gloves	Natural rubber		> 0,5	6 (> 480 minutes)	EN ISO 374

8.2.2.3. Respiratory protection

Respiratory protection:

Ventilation should be used to keep airborne quantities at a suitable level. In the event of insufficient ventilation: Dust mask with filter type P3

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Consumer exposure controls:

Do not expose pregnant or breastfeeding women.

Other information:

Separate working clothes from town clothes. Launder separately.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: White.
Appearance	: Powder.
Odour	: odourless.
Odour threshold	: Not available
Melting point	: > 350 °C
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not flammable
Explosive properties	: Not explosive.
Oxidising properties	: Non oxidizing.
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not available
pH	: 6 – 8 (10%)
pH solution	: Not available

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Viscosity, kinematic	: Not applicable
Solubility	: Water: < 0.00157 g/l
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 2.182 kg/m ³
Relative density	: Not available
Relative vapour density at 20°C	: Not applicable
Particle size	: Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

To our knowledge, the product does not present any particular risk, under normal conditions of use.

10.2. Chemical stability

Decomposes on exposure to temperature rise.

10.3. Possibility of hazardous reactions

Explosive compounds are formed on contact with : Strong reducing agents.

10.4. Conditions to avoid

Extremely high or low temperatures.

10.5. Incompatible materials

Strong reducing agents.

10.6. Hazardous decomposition products

No hazardous decomposition products known at room temperature.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	: Harmful if swallowed.
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: Not classified (Based on available data, the classification criteria are not met)
Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met) pH: 6 – 8 (10%)
Serious eye damage/irritation	: Not classified (Based on available data, the classification criteria are not met) pH: 6 – 8 (10%)
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	: Suspected of damaging the unborn child.
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)

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11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified (Based on available data, the classification criteria are not met)

Hazardous to the aquatic environment, long-term (chronic) : Not classified (Based on available data, the classification criteria are not met)

12.2. Persistence and degradability

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Persistence and degradability	Not rapidly degradable
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12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Component

Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	Potassium tetrafluoroborate (14075-53-7), boric acid (10043-35-3) ⁽¹⁾
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	Potassium tetrafluoroborate (14075-53-7), boric acid (10043-35-3) ⁽¹⁾

⁽¹⁾ Substance(s) in concentration below 0.1 % and displayed on a voluntary basis

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations	: Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. Empty containers should be taken for recycling, recovery or waste in accordance with local regulation.
HP Code	: HP6 - "Acute Toxicity:" waste which can cause acute toxic effects following oral or dermal administration, or inhalation exposure. HP10 - "Toxic for reproduction:" waste which has adverse effects on sexual function and fertility in adult males and females, as well as developmental toxicity in the offspring.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

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ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not regulated for transport				
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Other information, restriction and prohibition regulations : Customs code : 38 01 000.

REACH Annex XVII (Restriction List)

Not listed on REACH Annex XVII

REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

Contains substance(s) listed on the REACH Candidate List in concentrations $\geq 0.1\%$ or SCL: boric acid (EC 233-139-2, CAS 10043-35-3)

PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

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Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:	
ECHA	European Chemicals Agency
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS-No.	Chemical Abstract Service number
LC50	Median lethal concentration
EC-No.	European Community number
IMDG	International Maritime Dangerous Goods
LD50	Median lethal dose
DNEL	Derived-No Effect Level
ED	Endocrine disrupting properties
DOT	Department of Transportation (DOT)
IATA	International Air Transport Association
OECD	Organisation for Economic Co-operation and Development
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
PBT	Persistent Bioaccumulative Toxic
vPvB	Very Persistent and Very Bioaccumulative
ADG	Transport regulations (ADG)
IARC	International Agency for Research on Cancer
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
NOAEL	No-Observed Adverse Effect Level
VLE	Valeur Limite d'Exposition

Data sources : SDS of suppliers. ECHA (European Chemicals Agency). Environmental and toxicological data base from INERIS.

Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging. Manipulations are to be done only by qualified and authorised persons.

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Full text of H- and EUH-statements:	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 4	Hazardous to the aquatic environment – Chronic Hazard, Category 4
H302	Harmful if swallowed.
H360FD	May damage fertility. May damage the unborn child.
H361d	Suspected of damaging the unborn child.
H413	May cause long lasting harmful effects to aquatic life.
Repr. 1B	Reproductive toxicity, Category 1B
Repr. 2	Reproductive toxicity, Category 2

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.