



According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

SAFETY DATA SHEET

Smoke Emitters Pure-AX, Premium

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

1.1. Product identifier

Trade name

Smoke Emitters Pure-AX, Premium

▼ Other names / Synonyms

Pure-AX 3, UFI:UUUJ-G39T-Q00G-NVQR, Reg. No: 0163-P1-4582.

Pure-AX 9, UFI:4XUJ-0307-1000-A79T, Reg. No: 0163-P1-4582.

Pure-AX 18, UFI:K0VJ-G3PM-A00G-YJVW, Reg. No: 0163-P1-4582.

Pure-AX 60, UFI:T3VJ-03D0-M00Y-NWFX, Reg. No: 0163-P1-4582.

Product no.

PURE-AX 3, 9, 18, & 60. Reg. No: 0163-P1-4582

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

Relevant identified uses of the substance or mixture

Leakage tests, Chimney tests, FX

▼ Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

Björnax AB

Ringshyttan, Gruvstugan 729

71393 Nora

Sweden

+4658143150

www.bjornax.se

Contact person

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Revision

30/11/2022

SDS Version

3.0

Date of previous version

15/02/2022 (2.0)

1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service).

See section 4 "First aid measures".

SECTION 2: Hazards identification

2.1. ▼ Classification of the substance or mixture

Expl. 1.4; H204, Fire or projection hazard.

Aquatic Chronic 3; H412, Harmful to aquatic life with long lasting effects.

2.2. Label elements

Labelling is in accordance with the labelling exemptions for products intended to be marketed with a view to obtaining an explosive or pyrotechnic effect.

Hazard pictogram(s)



According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878



Signal word

Warning

Hazard statement(s)

Fire or projection hazard. (H204)

Safety statement(s)

General

Keep out of reach of children. (P102)

Prevention

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. (P210)

Do not subject to grinding/shock/friction. (P250)

Wear face protection/protective gloves/protective clothing. (P280)

Response

In case of fire: Explosion risk. Evacuate area. DO NOT fight fire when fire reaches explosives.

(P370+P372+P380+P373)

In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. (P370+P380+P375)

Storage

-

▼ Disposal

Dispose of contents/container in accordance with local regulation

. (P501)

▼ Hazardous substances

None known.

▼ Additional labelling

EUH031, Contact with acids liberates toxic gas.

2.3. Other hazards

▼ Additional warnings

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition/information on ingredients

3.1. ▼ Substances

Not applicable. This product is a mixture.

3.2. ▼ Mixtures

| Product/substance | Identifiers | % w/w | Classification | Note |
|--------------------|---|--------|---|------|
| potassium chlorate | CAS No.: 3811-04-9 EC No.: 223-289-7 UK-REACH: Index No.: 017-004-00-3 | 15-25% | Ox. Sol. 1, H271 Acute Tox. 4, H302 Acute Tox. 4, H332 Aquatic Chronic 2, H411 | [4] |

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

[4] Substance is listed in Annex I of the Prior Informed Consent Regulation (PIC, Regulation (EU) 649/2012).

SECTION 4: First aid measures

4.1. Description of first aid measures

General information



According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

Eye contact

Upon irritation of the eye: Remove contact lenses and open eyes widely. Flush eyes with water or saline water (20-30°C) for at least 5 minutes. Seek medical assistance and continue flushing during transport.

Ingestion

Provide plenty of water for the person to drink and stay with him/her. In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the victim lean forward with head down to avoid inhalation of- or choking on vomited material.

Burns

Rinse with water until pain stops then continue to rinse for 30 minutes.

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

None known.

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

None known.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Recommended: Waterjet, water mist, alcohol-resistant foam.

5.2. ▼ Special hazards arising from the substance or mixture

Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters. If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Halogenated compounds
Some metal oxides

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Avoid contact with the substance. Wear suitable protective equipment before handling. Follow emergency procedures. Evacuate the danger area and notify your supervisor. Ask for assistance from a competent person.

For emergency responders: Close off the hazard area. Ask for assistance from a competent person.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.

6.3. ▼ Methods and material for containment and cleaning up

Minor spills are collected with a cloth. Collection and disposal of the material shall be done with minimum creation of dust. Sweep and collect. Shall be contained in suitable and tightly closed disposal containers.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. ▼ Reference to other sections



According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

See section 13 "Disposal considerations" on handling of waste.
See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Because of the danger of self-ignition, any waste from the product, spray mist and soiled rags etc. are to be kept in a fire-proof place in air-tight containers, alternatively the waste is to be burned.

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. ▼ Conditions for safe storage, including any incompatibilities

Store in original packaging if possible. Explosives and explosive articles should be stored in accordance with the licence issued by the relevant national authority. Store under cool conditions. Store under dry conditions. Stable under normal storage conditions. Maximum storage quantity should be agreed with national authorities. Store in a well-ventilated place. Store in a closed container.

Recommended storage material

Always store in containers of the same material as the original container.

Storage temperature

Dry, cool and well ventilated

Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No substances are listed in the national list of substances with an occupational exposure limit.

▼ DNEL

No data available.

▼ PNEC

No data available.

8.2. ▼ Exposure controls

Control is unnecessary if the product is used as intended.

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

Occupational exposure limits have not been defined for the substances in this product.

Appropriate technical measures

Apply standard precautions during use of the product. Avoid inhalation of gas or dust.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

▼ Measures to avoid environmental exposure

Keep damming materials near the workplace. If possible, collect spillage during work.

8.3. Individual protection measures, such as personal protective equipment

▼ Generally

Use only UKCA marked protective equipment.

▼ Respiratory Equipment

| Work situation | Type | Class | Colour | Standards |
|----------------|-----------------------------------|-------|--------|-----------|
| | No special when used as intended. | | | |



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| Work situation | Type | Class | Colour | Standards |
|-----------------------------------|------|-------|--------|-----------|
| In case of inadequate ventilation | S/SL | P1 | White | EN149 |



Skin protection

| Recommended | Type/Category | Standards |
|-----------------------------------|---------------|-----------|
| No special when used as intended. | - | - |

Hand protection

| Material | Glove thickness (mm) | Breakthrough time (min.) | Standards |
|--------------------------|----------------------|--------------------------|-----------|
| No specific requirements | - | - | - |

Eye protection

| Type | Standards |
|--------------------------|-----------|
| No specific requirements | - |

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Solid

▼ Colour

Testing not relevant or not possible due to the nature of the product.

▼ Odour / Odour threshold

Aromatic

▼ pH

Testing not relevant or not possible due to the nature of the product.

▼ Density (g/cm³)

Testing not relevant or not possible due to the nature of the product.

Kinematic viscosity

Does not apply to solids.

▼ Particle characteristics

Testing not relevant or not possible due to the nature of the product.

Phase changes

▼ Melting point/Freezing point (°C)

Testing not relevant or not possible due to the nature of the product.

▼ Softening point/range (waxes and pastes) (°C)

Does not apply to solids.

Boiling point (°C)

Does not apply to solids.

▼ Vapour pressure

Testing not relevant or not possible due to the nature of the product.

Relative vapour density

Does not apply to solids.

▼ Decomposition temperature (°C)

Testing not relevant or not possible due to the nature of the product.

Data on fire and explosion hazards

Flash point (°C)

Does not apply to solids.

Auto-Ignition (°C)



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Not applicable. Product is an explosive.

Flammability (°C)

Over 300

Lower and upper explosion limit (% v/v)

Does not apply to solids.

Solubility

▼ **Solubility in water**

Testing not relevant or not possible due to the nature of the product.

▼ **n-octanol/water coefficient**

Testing not relevant or not possible due to the nature of the product.

▼ **Solubility in fat (g/L)**

Testing not relevant or not possible due to the nature of the product.

9.2. Other information

▼ **Other physical and chemical parameters**

No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Contact with acids liberates toxic gas.

10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

10.3. Possibility of hazardous reactions

Contact with acids liberates toxic gas.

10.4. Conditions to avoid

Heating may cause an explosion.

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. ▼ Hazardous decomposition products

Halogenated compounds

Some metal oxides

SECTION 11: Toxicological information

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

Acute toxicity

| | |
|-------------------|--------------------|
| Product/substance | potassium chlorate |
| Test method | |
| Species | Rabbit |
| Route of exposure | Dermal |
| Test | LD50 |
| Result | >2000 mg/kg |
| Other information | |

| | |
|-------------------|--------------------|
| Product/substance | potassium chlorate |
| Test method | |
| Species | Rat |
| Route of exposure | Oral |
| Test | LD50 |
| Result | 1870 mg/kg |
| Other information | |

Skin corrosion/irritation

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

Serious eye damage/irritation

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

Respiratory sensitisation



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

Skin sensitisation

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

Germ cell mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

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

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

11.2. Information on other hazards

▼ Long term effects

None known.

▼ Endocrine disrupting properties

None known.

▼ Other information

None known.

SECTION 12: Ecological information

12.1. ▼ Toxicity

No data available.

12.2. ▼ Persistence and degradability

No data available.

12.3. ▼ Bioaccumulative potential

No data available.

12.4. ▼ Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

12.6. ▼ Endocrine disrupting properties

None known.

12.7. ▼ Other adverse effects

This product contains substances that are toxic to the environment. May result in adverse effects to aquatic organisms.

This product contains substances, which may cause adverse long-term effects to the aquatic environment.

SECTION 13: Disposal considerations

▼ Waste treatment methods

Product is covered by the regulations on hazardous waste.

HP 1 - Explosive

HP 12 - Release of an acute toxic gas

HP 14 - Ecotoxic

Dispose of contents/container to an approved waste disposal plant.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

EWC code

10 03 99 Wastes not otherwise specified

▼ Specific labelling



According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Not applicable.

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

| | 14.1 UN / ID | 14.2 UN proper shipping name | 14.3 Hazard class(es) | 14.4 PG* | 14.5 Env** | Other information |
|------|-----------------|------------------------------------|--------------------------|-------------|---------------|-------------------|
| ADR | - | - | - | - | - | - |
| IMDG | - | - | - | - | - | - |
| IATA | - | - | - | - | - | - |

* Packing group

** Environmental hazards

▼ Additional information

Not dangerous goods according to ADR, IATA and IMDG.

14.6. ▼ Special precautions for user

Not applicable.

14.7. ▼ Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: Regulatory information

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

Restrictions for application

People under the age of 18 shall not be exposed to this product.

▼ Demands for specific education

No specific requirements.

SEVESO - Categories / dangerous substances

P1b - EXPLOSIVES, Qualifying quantity (lower-tier): 50 tonnes / (upper-tier): 200 tonnes

▼ Additional information

Not applicable.

▼ Sources

Control of Major Accident Hazards (COMAH) Regulations 2015.

Regulation (EU) No 649/2012 concerning the export and import of hazardous chemicals as retained and amended in UK law.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law.

Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

H271, May cause fire or explosion; strong oxidiser.

H302, Harmful if swallowed.

H332, Harmful if inhaled.

H411, Toxic to aquatic life with long lasting effects.

▼ Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway



According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CAS = Chemical Abstracts Service
CE = Conformité Européenne
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
CSA = Chemical Safety Assessment
CSR = Chemical Safety Report
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EINECS = European Inventory of Existing Commercial chemical Substances
ES = Exposure Scenario
EUH statement = CLP-specific Hazard statement
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IARC = International Agency for Research on Cancer (IARC)
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SCL = A specific concentration limit
SVHC = Substances of Very High Concern
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TWA = Time weighted average
UN = United Nations
UVBC = Unknown or variable composition, complex reaction products or of biological materials
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

▼ **Additional information**

The classification of the substance/mixture in regard of environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.
The classification of the mixture in regard to physical hazards has been based on experimental data.

▼ **The safety data sheet is validated by**

TF

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: GB-en