

SAFETY DATA SHEET

Smoke Emitters

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

1.1. Product identifier

▼Trade name

Smoke Emitters

▼ Other names / Synonyms

MINIAX, UFI:F8SJ-93KW-H00N-TN7T, Reg, No: 0163-P1-4583 MINIAX KS, UFI:8CSJ-T399-U004-FYTV, Reg, No: 0163-P1-4583 VENTILAX, UFI: 7FSJ-93YQ-400N-4ADX, Reg, No: 0163-P1-4583 BRANDAX VS, UFI:5HSJ-T3P3-F004-SP00, Reg, No: 0163-P1-4583 BRANDAX KS, UFI:PMSJ-A3CG-R00N-F0K2, Reg, No: 0163-P1-4583 PERFUME-AX 3, UFI:Y0UJ-E3DU-N00J-1FW3, Reg, No: 0163-P1-4581 PERFUME-AX 9, UFI: D2UJ-X337-Y001-PTG5, Reg, No: 0163-P1-4581 PERFUME-AX 18, UFI:C5UJ-E3SN-800J-C527, Reg, No: 0163-P1-4581 PERFUME-AX 60, UFI:58UJ-X3G1-K001-0GN9, Reg, No: 0163-P1-4581 SPLINTAX, SMOKE MATCH, UFI:2A1K-V3G7-A005-YR0V COLOUR SMOKE-AX 3, UFI:PQVI-I36S-S00F-89ID, Reg, No: 0163-P1-4580 COLOUR SMOKE-AX 9, UFI:VSVJ-13W6-200X-XN4F, Reg, No: 0163-P1-4580 COLOUR SMOKE-AX 18 ORANGE, UFI:RRWJ-M3GJ-F00D-6DJ5, Reg, No: 0163-P1-4580 COLOUR SMOKE-AX 18 YELLOW, UFI:5NWJ-33T5-400W-J1Y3, Reg, No: 0163-P1-4580 COLOUR SMOKE-AX 18 BLUE, UFI:TGWJ-33EC-H00W-7CSY, Reg, No: 0163-P1-4580 COLOUR SMOKE-AX 18 GREEN, UFI:YIWI-M33R-U00D-VQD1, Reg, No: 0163-P1-4580 COLOUR SMOKE-AX 18 RED, UFI:8TWJ-435X-R00V-VR47, Reg, No. 0163-P1-4580 COLOUR SMOKE-AX 18 DARK GREY, UFI:KWWI-M3VC-200D-H2Q9, Reg, No: 0163-P1-4580 COLOUR SMOKE-AX 60 ORANGE, UFI:HKXJ-P3DH-H00A-TTCT, Reg, No: 0163-P1-4580 COLOUR SMOKE-AX 60 YELLOW, UFI:VHXJ-53Q4-600U-5FSR, Reg, No: 0163-P1-4580 COLOUR SMOKE-AX 60 BLUE, UFI:3AXJ-53AA-K00U-USMM, Reg, No: 0163-P1-4580 COLOUR SMOKE-AX 60 GREEN, UFI:9EXJ-P30Q-W00C-G46P, Reg, No: 0163-P1-4580 COLOUR SMOKE-AX 60 RED, UFI:1PXJ-632W-T00U-G4XV, Reg, No: 0163-P1-4580 COLOUR SMOKE-AX 60 DARK GREY, UFI:N1WI-J3YD-000E-WNVN, Reg, No: 0163-P1-4580 AX-5, UFI:X6YJ-7379-N00T-F6F8, Reg, No: 0163-P1-4583 AX-13, UFI:CFYJ-R39G-K009-E76F, Reg, No: 0163-P1-4583 BRANDAX KSO, UFI:N1WJ-J3YD-000E-WNVN, Reg, No: 0163-P1-4583

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

Torbjörn Fredrikzon

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E-mail

info@bjornax.se

Revision

29/11/2022

SDS Version

8.0

Date of previous version

22/11/2022 (7.0)

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.

Acute Tox. 4; H302, Harmful if swallowed.

Eye Irrit. 2; H319, Causes serious eye irritation.

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)



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)

Response

-

Storage

-

Disposal

Dispose of contents/container in accordance with local regulation . (P501)

▼ Hazardous substances

potassium chlorate

ammonium chloride

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.

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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]
ammonium chloride CAS No.: 12125-02-9 EC No.: 235-186-4 UK-REACH: Index No.: 017-014-00-8		10-20%	Acute Tox. 4, H302 Eye Irrit. 2, H319	

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

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. Flush eyes immediately with plenty of water or isotonic water (20-30°C) for at least 5 minutes and continue until irritation stops. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

Ingestion

In the case of ingestion, contact a doctor immediately. If the person is conscious, give them water. DO NOT try to induce vomiting unless this is recommended by a doctor. Hold head facing down to prevent vomit returning mouth and throat. Prevent shock by keeping the injured person warm and calm. Initiate immediate resuscitation if breathing stops. If unconscious, roll the injured person into recovery position. Call an ambulance.

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

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

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

IF exposed or concerned:

Get immediate medical advice/attention.

Information to medics

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

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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

Nitrogen oxides (NO_x)

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

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

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

ammonium chloride

Long term exposure limit (8 hours) (mg/m³): 10

Short term exposure limit (15 minutes) (mg/m³): 20

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002. EH40/2005 Workplace exposure limits (Fourth Edition 2020).

DNEL

No data available.

PNEC

No data available.

8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

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

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures

Airborne gas and dust concentrations must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure emergency eyewash and showers are clearly marked.

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	Туре	Class	Colour	Standards	
	No special when used as intended.				
In case of inadequate ventilation	S/SL	P1	White	EN149	

Skin protection

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

Hand protection

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

Eye protection

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Туре	Standards
No specific requirements	-

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Solid

Colour

Not applicable

▼ Odour / Odour threshold

Aromatic

pН

Not applicable

Density (g/cm³)

No data available

Relative density

No data available

Kinematic viscosity

Not applicable - product is a solid

▼ Particle characteristics

Not applicable - product is an article

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)

Not applicable - product is an article

Auto-Ignition (°C)

>300

Flammability (°C)

>300

Lower and upper explosion limit (% v/v)

Not applicable - product is an article

Solubility

Solubility in water

Sparingly soluble

n-octanol/water coefficient

No data available

Solubility in fat (g/L)

Not applicable

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

Nitrogen oxides (NO_x)

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 Dermal

Route of exposure Test

LD50

Result Other information

>2000 mg/kg

Product/substance

potassium chlorate

Test method

Species

Rat

Route of exposure

Oral LD50

Test Result

1870 mg/kg

Other information

Product/substance

Test method

ammonium chloride

Species

Rat Route of exposure Oral LD50 Test

Result

1650 mg/kg

Other information

Harmful if swallowed.

Skin corrosion/irritation

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

Serious eve damage/irritation

Causes serious eye irritation.

Respiratory sensitisation

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.

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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

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

▼ 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 6 - Acute toxicity

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

Not applicable.

Contaminated packing

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

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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

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

Tactile warning.

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.

H319, Causes serious eye irritation.

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

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

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^{**} Environmental hazards



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