

SAFETY DATA SHEET

In accordance with 453/2010 and 1272/2008

(All references to EU regulations and directives are abbreviated into only the numeric term)

Date of compilation 2012-06-01



SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Trade name SMOKE PEN, REFILL

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

Identified uses Smoke for leakage tests and air flow studies

Uses that are advised against

1.3. Details of the supplier of the safety data sheet

Company BJÖRNAX AB
STRÅSSA FÖRETAGSBY
SE-71177 STRÅSSA
Telephone +46 581 43150
E-Mail info@bjornax.se

1.4. Emergency telephone number

In case of emergency contact toxicological information, emergency tel 112 (within Europe) or 911 (for USA and Canada). For other countries, use the built-in emergency number in your cell phone

For non-emergency poison information, see <http://www.who.int/ipcs/poisons/centre/directory/euro/en/>

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification in accordance with 1272/2008

Upon assessment, this mixture is not classified as hazardous according to 1272/2008.

Classification in accordance with 1999/45/EG

This product is considered not to be attributed any R phrase or any other risk information.

2.2. Label elements

Label information in accordance with 1272/2008

Hazard pictograms Not applicable
Signal words Not applicable
Hazard statements Not applicable

Label information in accordance with 1999/45/EG

C.f. section 16.

2.3. Other hazards

The product produces smoke which can cause irritation upon contact with the eyes or inhalation under conditions of long periods of exposure or incorrect use. In case of uncertainty about how the product should be used, please contact the manufacturer or the company from which the product was originally purchased.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

This product is composed of a mixture of several solid substances.

3.2. Mixtures

Note that the table shows known hazards of the ingredients in an absolutely pure form. These hazards are reduced or eliminated when mixed or diluted, c.f. Section 16d.

Constituent	Classification	Concentration
CELLULOSE		
CAS No 9004-34-6 EC No 232-674-9	<i>No phys haz, No tox haz</i> ;-	80 - 100%
STEARIC ACID		
CAS No 57-11-4 EC No 200-313-4	<i>No phys haz, No tox haz, No environmental hazard</i> ;-	6 - 10%

Occurrence of any impurity, stabilising additive, or individual ingredients other than the main ingredient is indicated by the chemical name and the purity level.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Generally

No special measures are considered to be necessary: if symptoms do occur however, call a doctor/physician.

Upon breathing in

Inhalation of chemicals from the product in normal use is not appropriate. For generated smoke: In the case of overexposure to generated smoke, move the affected person to fresh air. If symptoms persist, consult a doctor.

Upon contact with the eyes

Eye contact with chemicals from the product in normal use is not appropriate. For generated smoke: If symptoms occur, Flush with lukewarm water with the eye or eyes wide open. If symptoms persist, consult a doctor. In the case of a broken or tampered product, the procedure for the constituent chemicals is as follows: Flush immediately with lukewarm water for 15 - 20 min with the eye or eyes wide open. If symptoms persist, consult a doctor.

Upon skin contact

Normal washing of the skin is considered sufficient; If nevertheless symptoms do occur, contact a physician. Remove contaminated clothes.

Upon ingestion

No specific action is considered to be needed; As a precaution, induce vomiting and call a doctor/physician.

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

Information on symptoms are ambiguous or missing for this product.

SECTION 5: FIRE-FIGHTING MEASURES

5.0 General measures in case of fire or imminent fire

Alert the Fire Department tel 112 (in Europe). Save persons in danger, first. Remove gas cylinders, flammable articles and oxidising material.

5.1. Extinguishing media

Recommended extinguishing agents

Extinguish with water.

5.2. Special hazards arising from the substance or mixture

Dangerous combustion gases

Produces fumes containing harmful gases (carbon monoxide and carbon dioxide) when burning, and, in case of incomplete combustion, aldehydes and other toxic, harmful, irritant or environmentally harmful substances.

Particular risks upon fire extinguishing

5.3. Advice for fire-fighters

In case of fire use a respirator mask.

5.4. Other information

Fire properties of the product

Combustible solid.

Particular risks in case of fire

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

6.2. Environmental precautions

6.3. Methods and material for containment and cleaning up

Contaminated products should be treated as chemical waste and declared as non-hazardous goods.

6.4. Reference to other sections

For choice of gloves, c.f. Section 8.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

7.1.1.a Recommendations specified to allow safe handling of the substance or mixture

7.1.2. Advice on general occupational hygiene

7.2. Conditions for safe storage, including any incompatibilities

7.2.b3 How to control the effects of temperature

Store in a dry place not above normal room temperature.

7.2.d2 Specific designs for storage rooms or vessels

7.2.d4 Packaging compatibilities

Store only in the original package.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

8.1.1. National limit values, United Kingdom

All ingredients (cf. Section 3) lack occupational exposure limit values.

8.2. Exposure controls

8.2.1. Appropriate engineering controls

In terms of minimizing risks, no special attention is needed for this product besides the general obligations that follow EU directive 89/391 and national occupational legislation.

8.2.2. Individual protection measures, such as personal protective equipment

8.2.2.b1 Hand protection.

Protective gloves are normally not needed due to the properties of this product, but may be necessary for other reasons, e.g. mechanical risks, temperature conditions or microbiological risks. Very sensitive persons can use gloves labelled "Low Chemical resistant" or "Waterproof" or with the pictogram indicated here.



8.2.2.b2 Other skin protection.

8.2.2.c Respiratory protection.

Protective breathing equipment should only be required in extreme work-situations. Consult the manufacturer if this is the case.

Dust filter IIb (P2) may be required.

8.2.3. Environmental exposure controls

For limitation of environmental exposure, see Section 12.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

a) Appearance	State of aggregation: Solid substance or solid mixture Colour: beige
b) Odour	Odourless or almost odourless
d) pH	Not applicable
g) Flash point	> 165°C
n) Solubility	Solubility in water Insoluble(<0.001%)
s) Explosive properties	Not applicable

SECTION 10: STABILITY AND REACTIVITY

Stability

The product is stable.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1.2.1a Acute toxicity

Legend to abbreviations in the table: w_i = Maximal mass fraction of the substance in the mixture; ATE_{exp} = Experimentally obtained acute toxicity range estimate; ATE_{pe} = Converted acute toxicity point estimate; $ATE_{mixt} = 1/SUM(w_i/ATE_i)$; ATE_i = ATE for this ingredient.

Exposure route and unit: Oral (mg/kg bodyweight).

Ingredient	w_i	ATE_{exp}	ATE_{pe}	ATE_i/w_i
CELLULOSE	1		Not indicated	
STEARIC ACID	0.1	>5000	-	>50000
			ATE_{mixt}	>50000

Exposure route and unit: Dermal (mg/kg bodyweight).

Not applicable.

Exposure route and unit: Gases (ppmV).

Not applicable.

Exposure route and unit: Vapours (mg/l).

Not applicable.

Exposure route and unit: Dust/mist (mg/l).

Not applicable.

11.1.2.1b Irritation

The irritating properties of this mixture (c.f. Section 2) have been judged in accordance with the rules in 1272/2008 Annex I 3.2.3 and 3.3.3.

11.1.2.1c Corrosivity

The corrosive properties of this mixture (c.f. Section 2) have been judged in accordance with the rules in 1272/2008 Annex I 3.2.3 and 3.3.3.

11.1.2.1d Sensitisation

The sensitisation properties of this mixture (c.f. Section 2) have been judged in accordance with the rules in 1272/2008 Annex I 3.4.3, whereby possible impurities in the ingredients have been taken into account.

11.1.2.1e Repeated dose toxicity

The specific target organ toxicity - repeated exposure of this mixture (c.f. Section 2) has been judged in accordance with the rules in 1272/2008 Annex I 3.9.3, whereby possible impurities in the ingredients have been taken into account.

11.1.2.1f Carcinogenicity

The carcinogenic properties of this mixture (c.f. Section 2) have been judged in accordance with the rules in 1272/2008 Annex I 3.6.3.

11.1.2.1g Mutagenicity

The mutagenic properties of this mixture (c.f. Section 2) have been judged in accordance with the rules in 1272/2008 Annex I 3.5.3.

11.1.2.1h Toxicity for reproduction

The reproductive toxicity of this mixture (c.f. Section 2) has been judged in accordance with the rules in 1272/2008 Annex I 3.7.3.

11.1.7. Information on likely routes of exposure

Exposure must be assessed in accordance with the downstream user's chemical safety assessment according to 1907/2006 Article 37.

11.1.9. Delayed and immediate effects as well as chronic effects from short and long-term exposure

To the best of our knowledge, no chronic effects have been reported for this product.

11.1.10. Interactive effects

To the best of our knowledge, no synergistic effects have been reported for this product or any of its ingredients.

11.1.13. Other information

To the best of our knowledge this product does not affect discernment if used in the manner intended.

Effects on human micro flora has not been proven, or is negligible.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

General information

Not indicated

Mobility

General information on mobility in nature

No information about mobility in the nature exists but there is no reason to suppose the product to be ecologically harmful because of this.

Persistence and degradability

The product degrades in the natural environment.

Bioaccumulative potential

Neither this product, nor its contents, accumulates in nature.

Other harmful effects

Effect on the local environment

This product degrades rapidly but large emission within a short period of time may be harmful to the local environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste handling for the product

General guidelines for waste handling

The product is not classified as hazardous waste.

Also take local regulations for dealing with waste into account.

Cf. also national waste regulations.

Recycling of the product

This product is not usually recycled.

Transportation of waste

Waste class J(0) - Does not have adverse effects on health or the environment.

SECTION 14: TRANSPORT INFORMATION

This product is only supposed to be transported by road or railway and just the transport regulations ADR/RID thus apply. If other means of transport are to be used, contact the publisher of this safety data sheet.

Not classified as dangerous goods

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

14.8 Other transport information

SECTION 15: REGULATORY INFORMATION

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

Not applicable.

15.2. Chemical safety assessment

Assessment and chemical safety report in accordance with 1907/2006 Annex I has not yet been performed.

SECTION 16: OTHER INFORMATION

16a. Indication of where changes have been made to the previous version of the safety data sheet

Revisions of this document

This is the first version.

16b. Legend to abbreviations and acronyms used in the safety data sheet

Full texts for Hazard Class and Category Code mentioned in section 3

No phys haz Non-assigned physical hazard

No tox haz Not classified as toxic

No environmental hazard Not classified as being environmentally hazardous

Explanations of the abbreviations in Section 14

ADR European Agreement concerning the International Transport of Dangerous Goods by Road

RID Regulations concerning the International Transport of Dangerous Goods by Rail

16c. Key literature references and sources for data

Sources for data

Primary data for the calculation of the hazards has preferentially been taken from the official European classification list, 1272/2008 Annex I, as updated to 2012-06-01.

Where such data was lacking, on the second hand the documentation on which this official classification is based was used, e.g. IUCLID (International Uniform Chemical Information Database). On the third hand, information was used from reputable international chemical suppliers, and on the fourth hand from other available information, e.g. safety data sheets from other suppliers or information from non-profit associations, whereby the reliability of the source was judged by an expert. If, in spite of this, reliable information was not found, the hazards were judged by expert opinions based on the known properties of similar substances, and according to the principles in 1907/2006 and 1272/2008.

Full texts for Regulations mentioned in this Safety Data Sheet

- 453/2010 COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
- 1272/2008 REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
- 1999/45/EG DIRECTIVE 1999/45/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 May 1999 concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations
- 89/391 COUNCIL DIRECTIVE (89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work
- 1907/2006 REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC Article 37 COMMISSION REGULATION (EC) No 552/2009 of 22 June 2009 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as regards Annex XVII

16d. Methods of evaluating information referred to in 1272/2008 Article 9 which was used for the purpose of classification

The calculation of the hazards of this mixture has been performed as an evaluation by applying a weight of evidence determination using expert judgement in accordance with 1272/2008 Annex I, weighing all available information having a bearing on the determination of the hazards of the mixture, and in accordance with 1907/2006 Annex XI.

16e. List of relevant R phrases, hazard statements, safety phrases and/or precautionary statements

16f. Advice on any training appropriate for workers to ensure protection of human health and the environment

Warning for misuse

This product is not expected to cause severe harm to humans or the environment. However the manufacturer, the distributor or the supplier cannot be responsible for unusual or criminal use of the product.

Other relevant information

Label information in accordance with 1999/45/EG

Hazard symbol	Not applicable
R-phrases	Not applicable
S-phrases	Not applicable