

# MATERIAL SAFETY DATA SHEET

## 1. IDENTIFICATION

Product Name : BSX Foam  
Use : Fire Extinguishing Product  
Supplier : Britannia Fire Limited  
Ashwellthorpe Industrial Estate  
Ashwellthorpe  
NR16 1ER  
United Kingdom  
Telephone : +44 (0) 1508 488416  
Fax : +44 (0) 1508 481753  
E mail : [sales@britannia-fire.co.uk](mailto:sales@britannia-fire.co.uk)

## 2. HAZARDS IDENTIFICATION

Dangerous product : This product is flammable.  
Primary route of exposure : Inhalation. Eyes contact. Skin contact.  
Symptoms relating to use  
Inhalation : Inhalation of vapours may cause respiratory irritation. Cough.  
Skin contact : Irritating to skin.  
Eye contact : Redness, pain. Blurred vision. Tears. Risk of serious damage to eyes.  
Ingestion : Burning sensation. Cough. Cramps. May cause burns or irritation of the linings of the mouth, throat , and gastrointestinal tract.  
Swallowing a small quantity of this material will result in serious health hazard. Must not come into contact with food or be consumed.

### 2.1. Classification of the substance or mixture

Classification EC 67/548 or EC 1999/45 Classification : R10  
Xi; R36

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

### 2.2. Label elements

Labelling EC 67/548 or EC 1999/45

Symbol(s)



R Phrase(s) : Xi : Irritant  
: R10 : Flammable.  
R36 : Irritating to eyes.  
S Phrase(s) : S3 : Keep in a cool place.  
S16 : Keep away from sources of ignition - No smoking.  
S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S35 : This material and its container must be disposed of in a safe way.

S43 : In case of fire, use .  
 S51 :Use only in well-vent ilated areas.  
 S59 :Refer to manufacturer/supplier for information on recovery/recycling.

Contains : Ethanol  
 Urea

Labelling Regulation EC 1272/2008 (CLP)  
 Hazard pictograms



Hazard pictograms : SGH02 - SGH07

Precautionary statements

General

: P101 If medical advice is needed, have product container or label at hand.

: P102 - Keep out of reach of children.

: P103 - Read label before use.

Prevention

: P202 - Do not handle until all safety precautions have been read and Understood.

: P210 - Keep away from heat, sparks, open flames or hot surfaces. No smoking.

: P210 - Keep away from sources of ignition - No smoking.

: P262 - Do not get in eyes, on skin, or on clothing.

: P270 - Do not eat, drink or smoke when using this product.

: P273 - Avoid release to the environment.

Response

: P301+P330+P310+P321 - IF SWALLOWED : Rinse mouth. Immediately call a POISON CENTER or doctor. Specific treatment.

P302+352 - IF ON SKIN: Wash with plenty of soap and water.

P304+341 - IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338+P337+P313 - IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice.

P306+360 - IF ON CLOTHING : rinse immediately contaminated clothing and skin with plenty of water before removing clothes.

P309+311 - IF exposed or if you feel unwell: Call a POISON CENTER or doctor/ physician

Storage

: NA - Store in accordance with local, regional, national or international regulation.

2.3 Other hazards : None under normal conditions.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1./3.2. Substance/Preparation

Substance/Preparation Components : Preparation.

: This product is hazardous.

Substance name	Contents	CAS No	EC No	Annex No	Ref REACH	Classification
Ethanol	Between 5 and 10 %	64-17-5	200-578-603-002-6	00-5		F, R11
Urea	Between 0.5 and 5 %	57-136	200-315-			Xi, R36137f38 Undefined. (GHS)

#### 4. FIRST AID MEASURES

##### 4.1. Description of first aid measures

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

- Inhalation : Assure fresh air breathing.  
 Skin contact : Flush with plenty of water.  
 Eye contact : Seek medical attention immediately  
 Ingestion : Seek medical attention immediately.

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

###### First aid measures

- Inhalation : Assure fresh air breathing. Allow the victim to rest. Seek medical attention immediately.  
 Skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Seek medical advice.  
 Eye contact : Rinse immediately with plenty of water. Seek medical attention immediately.  
 Ingestion : Rinse mouth. Do not induce vomiting because of irritating effects. Take to hospital.

#### 5. FIREFIGHTING MEASURES

##### 5.1. Extinguishing media

Extinguishing media : Powder. Sand. Carbon dioxide (CO<sub>2</sub>). Water.

##### 5.2. Special hazards arising from the substance or mixture

Specific hazards : May form flammable/explosive vapour-air mixture.  
 Hazardous combustion products : Thermal decomposition generates : Corrosive vapours

##### 5.3. Advice for firefighters

Flammable class : This product is flammable.  
 Protection against fire : Do not enter fire area without proper protective equipment, including respiratory protection.  
 Prevention : No naked lights. No smoking.  
 Special procedures : Exercise caution when fighting any chemical fire.  
 Surrounding fires : Use water spray or fog for cooling exposed containers.

#### 6. ACCIDENTAL RELEASE MEASURES

##### 6.4. Reference to other sections

See Heading 8.

General precautions : Remove ignition sources.  
 Personal precautions : Spill should be handled by trained cleaning personnel properly equipped with respiratory and eye protection.  
 Environmental precautions : Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

Clean up methods : Collect spills and put it into appropriated container.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

- Personal Protection : Avoid all unnecessary exposure. Ensure prompt removal from eyes, skin and clothing.
- Handling : Keep away from food, drink and animal feeding stuffs. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.  
Handle empty containers with care because residual vapours are flammable.
- Technical protective measures : Both local exhaust and general room ventilation are usually required. Proper grounding procedures to avoid static electricity should be followed.
- General : No naked lights. No smoking. Store and handle as though always a serious potential fire/explosion and health hazard exists.

### 7.2 Conditions for safe storage, including any incompatibilities

- Storage : Keep in fireproof place. Keep only in the original container in a cool, well ventilated place. Keep container closed when not in use.  
Do not store in corrodible metal.
- Storage - away from : Heat sources. Direct sunlight.
- Precautions in handling and storage : in use, may form flammable vapour-air mixture.

### 7.3 Specific end use(s)

Not applicable.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

- Ethanol : TLV© -TWA [ppm] : 1000  
Ethanol : OEL (UK)-LTEL [ppm] :1000  
Ethanol : LTEL - UK [mg/m<sup>3</sup>] : 1920  
Ethanol : LTEL - UK [ppm] : 1000  
Ethanol :VLE - France [mg/m<sup>3</sup>] : 9500  
Ethanol :VLE - France [ppm] :5000  
Ethanol :VME - France [mg/m<sup>3</sup>] : 1900 Ethanol :VME - France [ppm] : 1000  
Ethanol :Arbeitsplatzgrenzwert AGW - Germany [mg/m<sup>3</sup>] TRGS 900 : 960  
Ethanol :MAK - Germany [ppm] : 500  
Ethanol : Spitzenbegrenzung I Oberschreitungsfaktor AGW - Germany TRGS 900 :2  
Ethanol :MAK (AU) Tagesmittelwert (ml/m<sup>3</sup>) : 1000  
Ethanol : MAK (AU) Tagesmittelwert (mg/m<sup>3</sup>) : 1900  
Ethanol : MAK (AU) Kurzzeitwerte (ml/m<sup>3</sup>) : 2000  
Ethanol : MAK (AU) Kurzzeitwerte (mg/m<sup>3</sup>) : 3800  
Ethanol : VLA-ED [ppm] : 1000  
Ethanol : VLA-ED [mg/m<sup>3</sup>] : 1910  
Ethanol :NGV - [ppm] : 500

Ethanol :NGV - [mg/m<sup>3</sup>] : 1000  
 Ethanol :KTV - [ppm] : 1000  
 Ethanol :KTV - [mg/m<sup>3</sup>] : 1900  
 Ethanol :Gra:nservrerdiar (DK) (ppm) : 1000  
 Ethanol : HTP-varden - 8 H - [ppm] : 1000  
 Ethanol : HTP-varden - 8 H - [mg/m<sup>3</sup>] : 1900  
 Ethanol : HTP-varden - 15min - [ppm] : 1300  
 Ethanol :Grensenservrerdiar (DK) : 1900  
 Ethanol : HTP-varden - 15min - [mg/m<sup>3</sup>] :2500  
 Ethanol : GV Value Limit (Norway) [ppm] : 500  
 Ethanol : GV Value Limit (Norway) [mg/m<sup>3</sup>] : 950  
 Ethanol : 8-Hour TWA (PL) (NOS) (mg/m<sup>3</sup>) : 1900  
 Ethanol : TLV-TWA (Belgium) (ppm) : 1000  
 Urea : TLV - ACGIH [mg/m<sup>3</sup>] : 10  
 Urea : OSHA PEL [mg/m<sup>3</sup>] : 15

## 8.2 Exposure controls

Personal protection

Respiratory protection : Approved dust or mist respirator should be used if airborne particles are generated when handling this material.

Hand protection : Wear suitable gloves resistant to chemical penetration.

Skin protection : Wear suitable protective clothing.

Eye protection : Chemical goggles or face shield with safety glasses.

Ingestion : When using, do not eat, drink or smoke.

Industrial hygiene : Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.  
Provide local exhaust or general room ventilation.

Occupational Exposure Limits : Ethanol :TLV<sup>©</sup> -TWA [ppm] : 1000

Ethanol :OEL (UK)-LTEL [ppm] :1000

Ethanol : LTEL - UK [mg/m<sup>3</sup>] : 1920

Ethanol : LTEL - UK [ppm] : 1000

Ethanol :VLE - France [mg/m<sup>3</sup>] : 9500

Ethanol :VLE - France [ppm] :5000

Ethanol :VME - France [mg/m<sup>3</sup>] : 1900

Ethanol : VME - France [ppm] : 1000

Ethanol : Arbeitsplatzgrenzwert AGW - Germany [mg/m<sup>3</sup>] : 960

Ethanol :MAK - Germany [ppm] :500

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Ethanol :VLA-ED [mg/m<sup>3</sup>] : 1910

Ethanol : NGV - [ppm] :500

Ethanol : NGV - [mg/m<sup>3</sup>] : 1000

Ethanol : KTV [ppm] : 1000

Ethanol : KTV - [mg/m<sup>3</sup>] : 1900

Ethanol :Grensenservrerdiar (DK) (ppm) : 1000

Ethanol : HTP-varden - 8 H - [ppm] : 1000  
Ethanol : HTP-varden - 8 H - [mg/m<sup>3</sup>] : 1900  
Ethanol : HTP-varden - 15min - [ppm] : 1300  
Ethanol :Groonservoordier (DK) : 1900  
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Ethanol :8-Hour TWA (PL) (NOŠ) (mg/m<sup>3</sup>) : 1900  
Ethanol :TLV-TWA (Belgium) (ppm) : 1000  
Urea :TLV - ACGIH [mg/m<sup>3</sup>] : 10  
Urea :OSHA PEL [mg/m<sup>3</sup>] : 15

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

#### 9.1.a. Appearance

Physical state at 20°C : Liquid.  
Colour : Yellow-brown.

#### 9.1.b. Odour

Odour : Characteristic.

#### 9.1.c. pH

pH value : 8.0-10

#### 9.1.d. Melting point/ Freezing point

No reliable data available.

#### 9.1.e. Initial boiling point - boiling range

Boiling point [°C] : 89.3

#### 9.1.f. Flash point

Flash point [°C] :47

#### 9.1.g. Evaporation rate

No reliable data available.

#### 9.1.h. Flammability

No reliable data available.

#### 9.1.i. Explosion limits (lower upper)

No reliable data available.

#### 9.1.j. Vapour pressure

No reliable data available.

#### 9.1.k. Vapour density

No reliable data available.

#### 9.1.l. Relative density

Density :1.07

#### 9.1.m. Solubility

Solubility in water:complete

#### 9.1.n. Partition coefficient : n-octanol / water

No reliable data available.

#### 9.1.o. Auto-ignition temperature

No reliable data available.

#### 9.1.p. Thermal decomposition

No reliable data available.

#### **9.1.q. Viscosity**

No reliable data available.

Viscosity

#### **9.1.r. Explosive Properties**

No reliable data available.

#### **9.2. Other information**

Refraction index (°):1.39

### **10. STABILITY AND REACTIVITY**

#### **10.1 Reactivity**

#### **10.2 Chemical stability**

Stability and reactivity : Stable under normal conditions.

#### **10.3 Possibility of hazardous reactions**

Hazardous reactions : Strong oxidizing agents.

#### **10.4. Conditions to avoid**

Conditions to avoid : Open flame. Overheating. Direct sunlight.

#### **10.5. Incompatible materials**

Materials to avoid : Strong oxidizers.

#### **10.6. Hazardous decomposition products**

Hazardous decomposition products : Thermal decomposition generates : Corrosive vapours. May release flammable gases.

Hazardous properties : May form flammable/explosive vapour-air mixture.

### **11. TOXICOLOGICAL INFORMATION**

#### **11.1. Information on toxicological effects**

O.E.C.D. guideline n°404 (dermal irritation) : BSX 233 must not be classified.

O.E.C.D. guideline n°405 (eye irritation) : BSX 233 must be classified R36 "irritating to eyes". The item is to be characterised by the symbol "Xi" and the warning label "irritant"

### **12. ECOLOGICAL INFORMATION**

#### **12.1. Toxicity**

Ecological effects information : OECD 3028 resp. EU C.9 : The test substance can be considered as "inherently biodegradable".

### **13. DISPOSAL CONSIDERATIONS**

#### **13.1. Waste treatment methods**

Dispose in a safe manner in accordance with local/national regulations.

General : Hazardous waste.

Dispose in a safe manner in accordance with local/national regulations.

#### 14. TRANSPORT INFORMATION

General information : Not classified as dangerous in the meaning of transport regulations.  
Not regulated

#### 15. REGULATORY INFORMATION

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

Ensure all national/local regulations are observed.

##### 15.2 Chemical safety assessment

In accordance with the Regulation EC No. 1272/2008 on classification, labelling and packaging of substances and mixtures, the test item must be classified in category 2 "irritating to eyes". The signal word "Warning" and hazard statement H319 "Causes serious eye irritation" are required.

Symbol(s) : Xi : Irritant

R Phrase(s) : R10 : Flammable.

R36 : Irritating to eyes.

S Phrase(s) : S3 : Keep in a cool place.

S16 : Keep away from sources of ignition - No smoking.

S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S35 : This material and its container must be disposed of in a safe way.

S43 : In case of fire, use .

S51 : Use only in well-ventilated areas .

S59 : Refer to manufacturer/supplier for information on recovery/recycling.

#### 16. OTHER INFORMATION

List of relevant R phrases (§ 3) : R10 : Flammable. - R36 : Irritating to eyes.

List of relevant H phrases (Section 3) : H225 - Highly flammable liquid and vapour

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

Revision : 4

Further information : None