



Safety Data Sheet according to Directive 91/155/EC

Revision Date: August 2018

1) Identification of the substance/preparation and the company

Trade Name: Brodie&Middleton Flamebar - all types.

Application: Flame retarding agent.

Manufacturer/Supplier:

Brodie&Middleton Ltd

30-31 Store Street

London WC1E 7QE

Telephone: 020-7836 3289

Fax: 020-7636 8733

2) Hazards Identification

Classification of the substance or mixture

Product definition: Mixture

Classification according to Regulation (EC) No. 1272/2008: Not classified

Label elements

Hazard pictograms:



Signal word

Warning

Hazard statements:

Causes serious eye irritation.

Precautionary statements:

Prevention:

Wear protective gloves and eye protection:
nitrile rubber gloves and Safety glasses
with side shields

Not applicable.

Dispose of contents and container in accordance with all local, regional, national and international regulations..

Response: 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 attention.

Storage: Not applicable.

Disposal: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements): Contains Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1). May produce an allergic reaction.

Other hazards

None known

3) Composition/Information on ingredients

Mixtures

Chemical characterization: Mixture

Hazardous ingredients:

Product/ingredient name	Identifiers	%	Regulation (EC) No 1272/2008 [CLP]	Type
Ammonium bromide	EC: 235-183-8 CAS: 12124-97-9	1 - <5	Eye Irrit. 2, H319	[1]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII

[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

[5] Substance of equivalent concern

Occupational exposure limits, if available, are listed in Section 8.

4) First Aid Measures

Description of first aid measures

General information

In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.

In case of inhalation

Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

Following skin contact

Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.

After eye contact

Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.

After ingestion

If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.

Protection of first-aiders

No action shall be taken involving any personal risk or without suitable training.

Most important symptoms and effects, both acute and delayed

There are no data available on the mixture itself.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Indication of any immediate medical attention and special treatment needed

Notes to physician: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments: No specific treatment.

See toxicological information (Section 11)

5) Fire Fighting Measures

Extinguishing media

Suitable extinguishing media

Recommended: alcohol-resistant foam, CO₂, powders, water spray.

Extinguishing media which must not be used for safety reasons:

Do not use water jet.

Special hazards arising from the substance or mixture

Hazards from the substance or mixture

Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.

Hazardous thermal decomposition products

Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

Advice for firefighters

Special protective actions for fire-fighters.

Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.

Special protective equipment for fire-fighters

Appropriate breathing apparatus may be required.

Additional information

No unusual hazard if involved in a fire.

6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Avoid breathing vapour or mist. Refer to protective measures listed in sections 7 and 8.

For emergency responders: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions

Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Preferably clean with a detergent. Avoid using solvents.

Reference to other sections

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

7) Handling and Storage

Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour, spray or mist. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

Put on appropriate personal protective equipment (see Section 8). Never use pressure to empty. Container is not a pressure vessel. Always keep in containers made from the same material as the original one.

Comply with the health and safety at work laws.

Do not allow to enter drains or watercourses.

When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations.

Notes on joint storage

Keep away from: oxidising agents, strong alkalis, strong acids.

Additional information on storage conditions

Store in a dry, cool and well-ventilated area. Keep container tightly closed. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Specific end use(s)

Specific use(s): Fire retardant agent for professional use only.

8) Exposure/Personal Protection

Control parameters

Occupational exposure limits

No exposure limit value known

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

No DNELs/DMELs available.

PNECs

No PNECs available

Exposure controls

Appropriate engineering controls

Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Safety glasses with side shields. (EN166)

Respiratory protection

Hand protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. The breakthrough time must be greater than the end use time of the product. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Gloves should be replaced regularly and if there is any sign of damage to the glove material. Always ensure that gloves are free from defects and that they are stored and used correctly. The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance. Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

Gloves

For prolonged or repeated handling, use the following type of gloves:

Recommended: nitrile rubber

The recommendation for the type or types of glove to use when handling this product is based on information from the following source: EN 374-3: 2003. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

Body protection

Wear overalls or long sleeved shirt. (EN 467)

Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

Not applicable.

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Environmental exposure controls

Do not allow to enter into surface water or drains.

9) Physical and chemical Properties

Information on basic physical and chemical properties

Appearance:

Physical state: liquid

Colour: clear

Odour: Mild. Characteristic

pH 5.5

Flash point (°C): Closed cup: not applicable

Relative Density at 20 °C: 1.04 to 1.14 g/cm³

Water solubility (g/L): Easily soluble in cold water and hot water.

Other information

This product has a shelf life of up to 2 years if kept sealed in original container and stored as recommended in Section 7.

10) Stability and Reactivity

Reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability

Chemical stability: Stable under recommended storage and handling conditions (see Section 7).

Possibility of hazardous reactions

Hazardous reactions: No hazardous reactions when stored and handled according to instructions.

Conditions to avoid

Conditions to avoid: When exposed to high temperatures may produce hazardous decomposition products.

Incompatible materials

Materials to avoid: Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.

Hazardous decomposition products

Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced. If involved in a fire, toxic gases including CO, CO₂ and smoke can be generated.

11) Toxicological Information

Information on toxicological effects

There are no data available on the mixture itself. If splashed in the eyes, the liquid may cause irritation and reversible damage. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
ammonium bromide	LD50 Oral	Rat	2700 mg/kg	-

Conclusion/Summary: Based on available data, the classification criteria are not met.

Acute toxicity estimates: Not available.

Skin corrosion/irritation; Serious eye damage/eye irritation

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

Respiratory or skin sensitisation

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

Specific target organ toxicity

Not available

Aspiration hazard

Not available

12) Ecological Information

Toxicity

There are no data available on the mixture itself. Do not allow to enter drains or watercourses.

Conclusion/Summary: Based on available data, the classification criteria are not met.

Persistence and degradability

Conclusion/Summary: Based on available data, the classification criteria are not met.

Bioaccumulative potential

Toxicological data are not available.

Mobility in soil

Toxicological data are not available.

Results of PBT assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6. Other adverse effects

No known significant effects or critical hazards.

13) Disposal Information

Waste treatment methods

Product

Methods of disposal

The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste

Yes.

Disposal considerations

Do not allow to enter drains or watercourses. Dispose of according to all federal, state and local applicable regulations. If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

European waste catalogue (EWC)

The European Waste Catalogue classification of this product, when disposed of as waste, is:

08 01 11* waste paint and varnish containing organic solvents or other dangerous substances.

Packaging

Methods of disposal

The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Disposal considerations

Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers.

Empty containers must be scrapped or reconditioned.

Not emptied containers are hazardous waste.

Special precautions

This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

14) Transport Information

UN number: not applicable

UN proper shipping name

Transport hazard class(es) not applicable

Packing group: not applicable

Environmental hazards

Land transport (ADR/RID): not applicable

Marine pollutant: not applicable

Special precautions for user

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.

Advices on safe handling: see parts 6 - 8

Additional information

Land transport (ADR/RID)

Tunnel restriction code -

Sea transport (IMDG)

EmS-No.: not applicable

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

Not applicable.

Special precautions for user

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

15) Regulatory Information

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

The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

CN code: 3809 91 00

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation:

None of the components are listed.

Substances of very high concern:

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.

Not applicable.

Other EU regulations

VOC for Ready-for-Use Mixture:

Not applicable.

Europe inventory:

All components are listed or exempted.

National regulations

Chemical Safety Assessment

This product contains substances for which Chemical Safety Assessments are still required.

16) Other information

This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations.

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification: Not classified.

Full text of abbreviated H statements:

H319 Causes serious eye irritation.

Full text of classifications[CLP/GHS]:

Eye Irrit. 2, H319 SERIOUS EYE DAMAGE/ EYE IRRITATION
- Category 2

Full text of abbreviated R: Not applicable.
phrases

Full text of classifications: Not applicable

To best of our knowledge the information contain herein is accurate. However, neither the above supplier assumes any liability whatsoever for the accuracy or completeness of the information herein

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist