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Hazardous Substance, Dangerous Goods

1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product name: Fire Rated Expanda Foam

SynonymsProduct CodeExpanda Foam Fire Rated Foam, 750 mL30840484, 382256Expanda Foam Fire Rated Foam, G/Grade30840485, 382264

Recommended use: Fire rated PU foam.

Supplier: Bostik Australia Pty Ltd Bostik New Zealand Limited

ABN: 79 003 893 838

Street Address: 51-71 High Street 19 Eastern Hutt Road Thomastown VIC 3074 Wingate Lower Hutt

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 Website:
 www.bostik.com.au
 www.bostik.co.nz

Emergency telephone number: Australia – 1800 033 111 New Zealand – 0800 243 622

2. HAZARDS IDENTIFICATION

This material is hazardous according to health criteria of Safe Work Australia.









Signal Word Danger

Hazard Classifications

Flammable Aerosols - Category 1 Acute Toxicity - Inhalation - Category 2 Skin Corrosion/Irritation - Category 2 Serious Eye Damage/Irritation - Category 2A Sensitisation - Respiratory - Category 1 Sensitisation - Skin - Category 1

Sensitisation - Skin - Category 1
Carcinogenicity - Category 2

Specific Target Organ Toxicity (Single Exposure) - Category 3 Respiratory Tract Irritation

Specific Target Organ Toxicity (Repeated Exposure) - Category 1

Hazard Statements

| H222 | Extremely flammable aerosol. |
|------|--|
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H330 | Fatal if inhaled. |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H335 | May cause respiratory irritation. |
| H351 | Suspected of causing cancer . |
| H372 | Causes damage to organs through prolonged or repeated exposure. |
| | |

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Prevention Precautionary Statements

| P102 | Keep out of reach of children. |
|------|---|
| P103 | Read label before use. |
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P210 | Keep away from heat/sparks/open flames/hot surfaces. No smoking. |
| P211 | Do not spray on an open flame or other ignition sources. |
| P251 | Do not pierce or burn, even after use. |
| P260 | Do not breathe dust, fume, gas, mist, vapours or spray. |
| P264 | Wash hands, face and all exposed skin thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P272 | Contaminated work clothing should not be allowed out of the workplace. |
| P281 | Use personal protective equipment as required. |
| P284 | Wear respiratory protection. |

In case of inadequate ventilation wear respiratory protection.

P285

P363

| Response Precautionary Statements | | | | |
|-----------------------------------|---|--|--|--|
| P101 | If medical advice is needed, have product container or label at hand. | | | |
| P302+P352 | IF ON SKIN: Wash with plenty of soap and water. | | | |
| P304+P341 | IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a | | | |
| | position comfortable for breathing. | | | |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact | | | |
| | lenses, if present and easy to do. Continue rinsing. | | | |
| P310 | Immediately call a POISON CENTER or doctor/physician. | | | |
| P312 | Call a POISON CENTER or doctor/physician if you feel unwell. | | | |
| P333+P313 | If skin irritation or rash occurs: Get medical advice/attention. | | | |
| P337+P313 | If eye irritation persists: Get medical advice/attention. | | | |
| P342+P311 | If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. | | | |
| P362 | Take off contaminated clothing and wash before reuse. | | | |
| | | | | |

Storage Precautionary Statements

| P403+P233 | Store in a well-ventilated place. Keep container tightly closed. |
|-----------|--|
| D 405 | |

Wash contaminated clothing before reuse.

P405 Store locked up.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Disposal Precautionary Statement

Dispose of contents/container in accordance with local, regional, national and P501

international regulations.

Poison Schedule: S6. Poison

DANGEROUS GOOD CLASSIFICATION

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

Dangerous Goods Class: 2.1

3. COMPOSITION INFORMATION

| CHEMICAL ENTITY | CAS NO | PROPORTION |
|------------------------------|-----------|--------------|
| Dimethylether | 115-10-6 | 1-10 % (w/w) |
| Diphenylmethane diisocyanate | 9016-87-9 | >25 % (w/w) |
| Ethane, 1,1-difluoro- | 75-37-6 | 1-10 % (w/w) |

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Propane, 2-methyl- 75-28-5 1-10 % (w/w)
Triethyl phosphate 78-40-0 1-10 % (w/w)
Ingredients determined to be Non-Hazardous Balance

100%

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 764 766).

Inhalation: Effects may be delayed. Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If breathing laboured and patient cyanotic (blue), ensure airways are clear and have a qualified person give oxygen through a facemask. If breathing has stopped apply artificial respiration at once. In the event of cardiac arrest, apply external cardiac massage. Seek immediate medical advice.

Skin Contact: Effects may be delayed. If skin or hair contact occurs, immediately remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre or a Doctor; or for 15 minutes and transport to Doctor or Hospital. For gross contamination, immediately drench with water and remove clothing. Continue to flush skin and hair with plenty of water (and soap if material is insoluble). For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. If swelling, redness, blistering, or irritation occurs seek medical assistance.

Eye contact: If in eyes, hold eyelids apart and flush the eyes continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a Doctor; or for at least 15 minutes and transport to Doctor or Hospital.

Ingestion: Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. Never give anything by the mouth to an unconscious patient. If vomiting occurs give further water. Seek medical advice.

Notes to physician: Treat symptomatically. Effects may be delayed.

5. FIRE FIGHTING MEASURES

Hazchem Code: 2YE

Suitable extinguishing media: If material is involved in a fire use water fog (or if unavailable fine water spray), alcohol resistant foam, standard foam, dry agent (carbon dioxide, dry chemical powder).

Specific hazards: Extremely flammable aerosol. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Nearby equipment must be earthed. Electrical requirements for work area should be assessed according to AS3000. Vapour may travel a considerable distance to source of ignition and flash back. Avoid all ignition sources. All potential sources of ignition (open flames, pilot lights, furnaces, spark producing switches and electrical equipment etc) must be eliminated both in and near the work area. Do NOT smoke.

Fire fighting further advice: Heating can cause expansion or decomposition leading to violent rupture of containers. If safe to do so, remove containers from path of fire. Keep containers cool with water spray. On burning or decomposing may emit toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion or decomposition.

6. ACCIDENTAL RELEASE MEASURES

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SMALL SPILLS

Wear protective equipment to prevent skin and eye contamination. Avoid inhalation of gas. If safe to do so, isolate the leak. Increase ventilation to assist with dispersion.

LARGE SPILLS

If safe to do so, shut off all possible sources of ignition. Clear area of all unprotected personnel. Use a spark-free shovel. If safe to do so, isolate the leak. Increase ventilation to assist with dispersion. If contamination of crops, sewers or waterways has occurred advise local emergency services.

Dangerous Goods - Initial Emergency Response Guide No: 49

7. HANDLING AND STORAGE

Handling: Avoid eye contact and skin contact. Avoid inhalation of vapour, mist or aerosols.

Storage: Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Store away from sources of heat and/or ignition. Store locked up. Do not expose to temperatures exceeding 50 °C/122 °F Keep containers closed when not in use - check regularly for leaks.

This material is classified as a Division 2.1 Flammable Gas as per the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and/or the "New Zealand NZS5433: Transport of Dangerous Goods on Land" and must be stored in accordance with the relevant regulations.

This material is a Scheduled Poison Schedule 6 (Poison) and must be stored, maintained and used in accordance with the relevant regulations.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National occupational exposure limits:

| | TWA | | STEL | | NOTICES |
|---------------------------|-----|-------|------|-------|---------|
| | ppm | mg/m3 | ppm | mg/m3 | |
| Dimethyl ether 115-10-6 | 400 | 760 | 500 | 950 | - |
| Isocyanates, all (as-NCO) | - | 0.02 | - | 0.07 | Sen |

As published by Safe Work Australia.

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TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

STEL (Short Term Exposure Limit) - the average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

'Sen' Notice - sensitiser. The substance can cause a specific immune response in some people. An affected individual may subsequently react to exposure to minute levels of that substance.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept too as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

If the directions for use on the product label are followed, exposure of individuals using the product should not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.

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Biological Limit Values: As per the "National Model Regulations for the Control of Workplace Hazardous Substances (Safe Work Australia)" the following ingredients in this material requires Health Surveillance:

Isocvanates

For detailed information see "Guidelines for Health Surveillance (Safe Work Australia)"

Engineering Measures: Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Use only in well ventilated areas. Use with local exhaust ventilation or while wearing appropriate respirator. Vapour heavier than air - prevent concentration in hollows or sumps. Do NOT enter confined spaces where vapour may have collected.

Personal Protection Equipment: SAFETY SHOES, OVERALLS, GLOVES, CHEMICAL GOGGLES, AIR MASK.

Wear safety shoes, overalls, gloves, chemical goggles, air mask. Use with adequate ventilation. If inhalation risk exists, wear air-supplied mask meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Available information suggests that gloves made from polyvinyl alcohol (PVA) should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Hygiene measures: Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid contact with clothing. Avoid eye contact and skin contact. Avoid inhalation of vapour, mist or aerosols. Ensure that eyewash stations and safety showers are close to the workstation location.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: Aerosol Colour: N Av

Odour: Characterisitc

Solubility: N Av

Density: 1.1 g/cm3 @ 20 oC

Relative Vapour Density (air=1): 1.1 Vapour Pressure (20 °C): N Av Flash Point (°C): <0 Flammability Limits (%): N Av **Autoignition Temperature (°C):** N Av Melting Point/Range (°C): <0 Boiling Point/Range (°C): <0 pH: N App Viscosity: N Av Total VOC (g/Litre): N Av

> (Typical values only - consult specification sheet) N Av = Not available, N App = Not applicable

10. STABILITY AND REACTIVITY

Chemical stability: This material is thermally stable when stored and used as directed.

Conditions to avoid: Elevated temperatures and sources of ignition.

Incompatible materials: Oxidising agents.

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Hazardous decomposition products: Oxides of carbon and nitrogen, smoke and other toxic fumes.

Hazardous reactions: No known hazardous reactions.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Acute Effects

Inhalation: Fatal if inhaled. Material is an irritant to mucous membranes and respiratory tract. A respiratory sensitiser. Can cause possible allergic reactions.

Skin contact: Contact with skin will result in irritation. A skin sensitiser. Repeated or prolonged skin contact may lead to allergic contact dermatitis.

Ingestion: Swallowing can result in nausea, vomiting and irritation of the gastrointestinal tract.

Eye contact: An eye irritant.

Acute toxicity

Inhalation: This material has been classified as a Category 2 Hazard. Acute toxicity estimate (based on ingredients): 100 - 500 ppm

Skin contact: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >2,000 mg/Kg

Ingestion: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >2,000 mg/Kg

Corrosion/Irritancy: Eye: this material has been classified as a Category 2A Hazard (reversible effects to eyes). Skin: this material has been classified as a Category 2 Hazard (reversible effects to skin).

Sensitisation: Inhalation: this material has been classified as a Category 1 Hazard (respiratory sensitiser). Skin: this material has been classified as a Category 1 Hazard (skin sensitiser).

Aspiration hazard: This material has been classified as non-hazardous.

Specific target organ toxicity (single exposure): This material has been classified as a Category 3 Hazard. Exposure via inhalation may result in respiratory irritation.

Chronic Toxicity

Mutagenicity: This material has been classified as non-hazardous.

Carcinogenicity: This material has been classified as a Category 2 Hazard.

Reproductive toxicity (including via lactation): This material has been classified as non-hazardous.

Specific target organ toxicity (repeat exposure): This material has been classified as a Category 1 Hazard. Exposure via inhalation.

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

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Acute aquatic hazard: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >100 mg/L

Long-term aquatic hazard: This material has been classified as non-hazardous. Non-rapidly or rapidly degradable substance for which there are adequate chronic toxicity data available OR in the absence of chronic toxicity data, Acute toxicity estimate (based on ingredients): >100 mg/L, where the substance is not rapidly degradable and/or BCF < 500 and/or log K_{ow} < 4.

Ecotoxicity: No information available.

Persistence and degradability: No information available.

Bioaccumulative potential: No information available.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see "Section 8. Exposure Controls and Personal Protection" of this SDS.

If possible material and its container should be recycled. If material or container cannot be recycled, dispose in accordance with local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".



UN No: 1950
Dangerous Goods Class: 2.1
Packing Group: None
Hazchem Code: 2YE
Emergency Response Guide No: 49

Proper Shipping Name: AEROSOLS

Segregation Dangerous Goods: Not to be loaded with explosives (Class 1), flammable liquids (Class 3), if both are in bulk, flammable solids (Class 4.1), spontaneously combustible substances (Class 4.2), dangerous when wet substances (Class 4.3), oxidising agents (Class 5.1), organic peroxides (Class 5.2) or radioactive substances (Class 7). Exemptions may apply.

MARINE TRANSPORT

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

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UN No: 1950
Dangerous Goods Class: 2.1
Packing Group: None

Proper Shipping Name: AEROSOLS

AIR TRANSPORT

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.



UN No: 1950
Dangerous Goods Class: 2.1
Packing Group: None

Proper Shipping Name: AEROSOLS, FLAMMABLE

15. REGULATORY INFORMATION

HSNO Group Standard: HSR002517 - Aerosols (Flammable, Toxic) [6.7]) Group Standard 2006

This material is not subject to the following international agreements:

Montreal Protocol (Ozone depleting substances)

The Stockholm Convention (Persistent Organic Pollutants)

The Rotterdam Convention (Prior Informed Consent)

International Convention for the Prevention of Pollution from Ships (MARPOL)

This material is subject to the following international agreements:

Basel Convention (Hazardous Waste)

• Wastes from production, formulation and use of resins, latex, plasticizers, glues/adhesives

This material/constituent(s) is covered by the following requirements:

- The Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) established under the Therapeutic Goods Act (Commonwealth).
- All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

Literary reference

This MSDS has been prepared by Chemical Data Services Pty Ltd (chemdata.com.au) on behalf of its client.

Reason for issue: Revised

Material Safety Data Sheets are updated frequently. Please ensure that you have a current copy.

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This MSDS summarises at the date of issue our best knowledge of the health and safety hazard information of the product, and in particular how to safely handle and use the product in the workplace. Since Bostik Australia Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this MSDS in the context of how the user intends to handle and use the product in the workplace.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.

Our responsibility for product as sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available upon request.

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