Material Safety Data Sheet

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Hazardous Substance, Dangerous Goods

1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product name: **Expanda Foam Gun Grade**

Synonyms:
Expanda Foam Gun Grade, 750 mL

Mancode
287040

Recommended use: General purpose PU foam for filling cavities around windows, door and between walls, etc.

Supplier:	Bostik Australia Pty Ltd	Bostik New Zealand Limited
ABN:	79 003 893 838	
Street Address:	51-71 High Street Thomastown VIC 3074 Australia	19 Eastern Hutt Road Wingate Lower Hutt New Zealand
Telephone:	+613 9279-9333	+644 567-5119
Facsimile:	+613 9279-9342	+644 567-5412
Website:	www.bostik.com.au	www.bostik.co.nz

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

2. HAZARDS IDENTIFICATION

AUSTRALIA CLASSIFICATION

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

Hazard Category:

Xn	Harmful
Xi	Irritant

Risk Phrase(s):

R12:	Extremely Flammable.
R20:	Harmful by inhalation.
R36/37/38:	Irritating to eyes, respiratory system and skin.
Carc. Cat 3. R40:	Possible risk of irreversible effects.
R48/20:	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R42/43:	May cause sensitisation by inhalation and skin contact.

Safety Phrase(s)

S16:	Keep away from sources of ignition.
S23:	Do not breathe vapour.
S24/25:	Avoid contact with skin and eyes.
S36/37/39:	Wear suitable protective clothing, gloves and eye/face protection.
S38:	In case of insufficient ventilation, wear suitable respiratory equipment.

Poisons Schedule (Aust): S6

This material is a Scheduled Poison S6 and must be stored, maintained and used in accordance with the relevant regulations.

NEW ZEALAND CLASSIFICATION

This material is hazardous according to health criteria of ERMA New Zealand

ERMA Group Standard:
Construction Products (Subsidiary Hazard) Group Standard 2006; HSR002544

HSNO Hazard Classification

2.1.2A	Flammable aerosols
6.1D	Substances that are acutely toxic.
6.3A	Substances that are irritating to the skin
6.4A	Substances that are irritating to the eye
6.5A	Substances that are respiratory sensitisers
6.5B	Substances that are contact sensitisers
6.7B	Substances that are suspected human carcinogens
6.9	Respiratory tract irritant
6.9A	Substances that are toxic to human target organs or systems (repeated exposure)

Hazard Statement:

H222	Extremely flammable aerosol.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful 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.

Prevention Statement:

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 all sources of ignition. No smoking.
P211	Do not spray on an open flame or other Ignition source.
P251	Pressurized container: Do not pierce or burn, even after use.
P260	Do not breathe vapour.
P261	Avoid breathing vapour.
P264	Wash hands, face and all exposed skin thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective clothing, gloves, eye/face protection and suitable respirator
P281	Use personal protective equipment as required.
P285	In case of inadequate ventilation wear respiratory protection.

DANGEROUS GOODS 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”.

Class: 2.1 Flammable Gas

3. COMPOSITION INFORMATION

CHEMICAL ENTITY	CAS NO.	PROPORTION
4,4'-Methylenediphenyl diisocyanate	101-68-8/9016-87-9	40-48%
Propane/butane/dimethylether	74-98-6/106-97-8/115-10-6	1-20%
Non hazardous ingredients	-	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: 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: 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: Immediately 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 immediate medical advice.

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

5. FIRE-FIGHTING MEASURES

Specific hazards: Flammable gas. 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 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.

Hazchem Code: Not applicable.

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

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILLS
Wear protective equipment to prevent skin and eye contamination. Avoid inhalation of vapours. Wipe up with absorbent (clean rag or paper towels). Collect and seal in properly labelled containers or drums for disposal.

LARGE SPILLS
Shut off all possible sources of ignition. Clear area of all unprotected personnel. Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. If contamination of sewers or waterways has occurred advise local emergency services.

Dangerous Goods – Initial Emergency Response Guide No: 49.

7. HANDLING AND STORAGE

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

Storage: Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from incompatible materials described in Section 10. Store away from sources of heat or ignition. Keep containers closed when not in use - check regularly for leaks.

This material is classified as a Dangerous Good Class 2.1 Flammable Gas as per the criteria of the Australian and New Zealand Dangerous Goods Code and must be stored in accordance with the relevant regulations.

This material is a Scheduled Poison S6 and must be stored, maintained and used in accordance with the relevant regulations.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National occupational exposure limits:
No value assigned for this specific material by Safe Work Australia or Department of Labour New Zealand.

However for:

	TWA		STEL		CARCINOGEN	NOTICES
	ppm	mg/m3	ppm	mg/m3	CATEGORY	
Isocyanates, all, (as –NCO)	-	0.02	-	0.07	-	'Sen'
Butane	800	1,900	-	-	-	-
Propane	-	-	-	-	-	Asphyxiant
Dimethylether*	400	760	500	950	-	-

* Suppliers recommendations.

As published by the Safe Work Australia or Department of Labour New Zealand.

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.

WES-TWA (Workplace Exposure Standard – Time-weighted Average). The time-weighted average exposure standard designed to protect the worker for the effects of long-term exposure.

WES-STEL (Workplace Exposure Standard - Short-Term Exposure Limit). The 15-minute average exposure standard. Applies to any 15-minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue changes, or nacosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply.

`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.
*** Medical supervision of all employees who handle or come in contact with respiratory sensitisers is recommended. Personnel with a history of asthma-type conditions, bronchitis or skin sensitisation conditions should not work with MDI based products.***

*** The Occupation Exposure Standards do not apply to previously sensitised individuals. Sensitised individuals should be removed from any further exposure.***

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.

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:

Isocyanates.

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.

Personal protection equipment: OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES, RESPIRATOR.

Wear overalls, chemical goggles and impervious gloves. Use with adequate ventilation. If inhalation risk exists wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Available information suggests that gloves made from butyl rubber 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form / Colour / Odour: Opaque, light grey liquid with hydrocarbon odour.

Solubility:	Insoluble in water. Reacts with water.
Specific Gravity (20 °C):	1.02
Relative Vapour Density (air=1):	>1
Vapour Pressure (20 °C):	0.7 MPa
Flash Point (°C):	200*
Flammability Limits (%):	LEL – 1.5, UEL – 16
Autoignition Temperature (°C):	240*
Melting Point/Range (°C):	N Av
Boiling Point/Range (°C):	N Av
pH:	N App

* values for MDI
(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: No information available.

Incompatible Materials: Oxidising agents.

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

Hazardous reactions: No information available.

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: Material is irritant to mucous membranes and respiratory tract. Inhalation of vapour can result in headaches, dizziness and possible nausea. 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.

Eye contact: An eye irritant.

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

Long Term Effects: No information available for product.

Acute toxicity / Chronic toxicity
No LD50 data available for the product.

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

Ecotoxicity: No information available.

Persistence and degradability: No information available.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Refer to State/Territory Land Waste Management Authority.

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
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), however 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.

UN No:	1950
Dangerous Goods Class:	2.1

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

Proper Shipping Name: AEROSOLS

15. REGULATORY INFORMATION

Poisons Schedule (Aust): S6

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

Literary reference

This Material Safety Data Sheet has been prepared by EIAS Pty Ltd on behalf of its client.

Reason(s) For Issue: Revised
Addition of NZ Classification

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

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.