

E-THERM THERMAL INSULATION

1. PRODUCT AND COMPANY IDENTIFICATION

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| Supplier Name THERMOTEC AUSTRALIA PTY LTD | Web Site: www.thermotec.com.au |
| Address: 168 Carrington Street, REVESBY, NSW, 2212, AUSTRALIA. | E-mail: michael@thermotec.com.au |
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| Telephone +612 9771 6400 | Reviewed Date: 07 June 2013 |

Use(s): Thermal and Acoustic Reflective Insulation

2. HAZARDS IDENTIFICATION

NOT CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

| | | | |
|------------------------|------|----------------------------|----------------|
| UN No. | None | Dangerous class | None |
| Hazchem code | None | Poisons Schedule | None |
| Packaging group | None | Manufacturing Codes | E-therm AG/ DS |

3. COMPOSITION/ INFORMATION ON INGREDIENTS

Physical description/properties

Appearance: Black or Grey LDPE material, Polyethylene homopolymer foam laminate with foil facing, as aluminum fire retardant.

Physical and Chemical Properties

Thermal Conductivity 0.03 W/mK at 23Degrees Celsius. By ASTM C653-97

Melting/decomposition range >90 Degrees Celsius (Softening) (Decomposition @ >300C)

Vapour pressure NA

Per cent volatile nil

SG Density 50Kg/m3

Flash point over 150C

Flammability limit AS1530.2.1989 Self extinguishing upon removal of direct flame source.

Auto ignition temperature Avoid long term exposure over 340C.

MATERIAL SAFETY DATA SHEET



| Chemical entity: | CAS No. | Proportion |
|------------------|-----------|------------|
| Polyethylene | 9002-88-4 | >95% |

4. FIRST AID MEASURES

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| Swallowed | If swallowed do not induce vomiting, seek medical advice |
| Eye | If product comes in contact with eyes wash affected area with cold water, irritation continues seek Medical advice. |
| Skin | In the event of abrasion or irritation of skin seek medical advice. |
| Inhaled | If fumes or combustion inhaled, remove from contaminated area and seek medical advice. |
| Advice to Doctor | Treat symptomatically. |

5. FIRE FIGHTING MEASURES

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| Flammability | <p>Material should be kept away from excessive heat sources.</p> <p>The foam backed products may burn with high heat and evolution of black smoke.</p> <p>Foil faced products (eg 4zero) comply with AS1530.3.1989 four zero fire rating.</p> <p>Test report available on request.</p> <p>Test report on foams available on request.</p> |
| Fire and Explosion | <p>There is potential for fire or explosion. If is not fully degassed. Always check with manufacturers special instructions for fire and explosion hazards.</p> <p>Must be kept away from any source of ignition until fully degassed. Contains blowing agent (propane).</p> <p>Normal fire fighting procedures should be allowed for to avoid inhalation of smoke and gases.</p> |
| Extinguishing | Dry chemical, water, carbon dioxide. |

6. ACCIDENTAL RELEASE MEASURES

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| Spillage/ Disposal | Dispose of as landfill as required by local or state regulation. Recycling is possible contact manufacturer for recycling options. |
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7. STORAGE AND HANDLING

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| Storage & transport | <p>Store in dry areas. Transport under cover where possible, no hazard precaution requirements.</p> <p>All rolls must be lifted with a minimum of two persons.</p> <p>Average weight per roll/box may be in excess of 30KG</p> |
| Handling | <p>Read all the product label before use. Use of a safe work practices are recommended to avoid eye or skin contact and inhalation. Good personal hygiene observation, including washing hands before eating. Prohibit smoking in contaminated areas.</p> |

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

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| Exposure Stds | No exposure limit allocated |
| Biological Limits | No Biological limit allocated |
| Engineering Controls | Use in well ventilated areas. Avoid inhalation. Observe State regulation on speed and direction of airflow away from operators. |
| PPE | Not required any Personal Protective Equipment under normal conditions of use. Where an inhalation hazard exists, wear dust-proof goggles and a particulate respirator. |

9. PHYSICAL AND CHEMICAL PROPERTIES

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|---|--|---------------------------------------|
| Appearance | Black or white LDPE material, Polyethylene homopolymer foam laminate with foil facing, as aluminum fire retardant. | |
| Solubility (water) | Insoluble | Boiling point (°C) @ >300C |
| Melting point (°C) @>90 Degrees Celsius | | Vapour pressure @ 25° (kpa) NA |
| Specific gravity | NA | Flash point over 150C |

10. STABILITY AND REACTIVITY

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| Hazard of use/ storage | Stable under normal storage and required temperature |
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MATERIAL SAFETY DATA SHEET



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| Material to Avoid | Incompatible with hydrofluoric acid (violently), oxidising agents (eg. Hypochlorites), acid and heat. |
| Hazardous Decomposition Products | May evolve toxic gases (carbon oxides, hydrocarbons) when heated to decomposition |

11. TOXICOLOGICAL INFORMATION

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| Health Hazard Summary | The material does not contain any ingredient which under any normal installation conditions should lead to health hazards such as skin irritations, mucous irritation or breathing difficult |
| Eye | Not normally a hazard due to physical form, mechanical injury possible from particulate matter. |
| Inhalation | Not normally a hazard due to non-volatile nature of product. |
| Skin | Overexposure is unlikely due in this form of product. |
| Ingestion | Not normally a hazard due to physical form of product. |
| Toxicity Data | POLYETHYLENE (9002-88-4) |

12. ECOLOGICAL INFORMATION

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| Environment | Availability of Limited ecotoxicity data for this product while preparing this report. Appropriate measures are taken to prevent this product from entering the environment |
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13. DISPOSAL CONSIDERATIONS

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| Legislation | Dispose of in accordance with relevant local legislation. |
| Waste disposal | Reuse where possible. No special precautions are required for this product |

14. TRANSPORT INFORMATION

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| UN No None Allocated | Dangerous goods class None Allocated |
| Subsidiary risk None Allocated | EPG card None Allocated |
| Shipping name None Allocated | Packing group None Allocated |
| Poisons schedule None Allocated | Hazchem code None Allocated |

MATERIAL SAFETY DATA SHEET



15. REGULATORY INFORMATION

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|------------------------|---|
| AICS | All chemicals listed on the Australian Inventory of Chemical Substances (AICS). |
| Poison Schedule | A poison schedule number has not been allocated to this product using the criteria in the standard for the Uniform Scheduling of Drugs and Poisons (SUSDP). |

16. OTHER INFORMATION

This information relates only to specific material designated and may not be valid for such material used in combination with any other materials or in any process, such information is to best of our knowledge, accurate and reliable as of the date compiled. Since conditions of use are beyond our control, the data is not to be taken as warranty or representation for which Thermotec Australia Pty Ltd assumes legal responsibility. It is the user's responsibility to satisfy him/herself as to the sustainability and completeness of such information for his own particular use. Use of the data and information must be determined by the user to be in accordance with local laws and regulations.