

Material Safety Data Sheet

THERMIA B OIL

Date prepared: 15th July 1999

Date revised: N/A (first issue)

0CON-316

1. Identification of the Substance/Preparation and the Company/ Undertaking

Substance or preparation trade name:	THERMIA B OIL
Unique reference number(s):	0CON-316
Company/undertaking name & address:	Logitech Ltd., Erskine Ferry Road, Old Kilpatrick, Glasgow G605EU, Scotland, UK
Telephone:	(+44) 1389 875444
Emergency telephone number:	As above

2. Composition

Thermia B Oil is a highly refined mineral oil manufactured from crude petroleum oil. It is defined as SUBSTANCE in EINECS and is covered by the following EINECS and CAS Numbers:

**EINECS NUMBER 265-169-7
CAS NUMBER 64742-65-0**

*Distillates (petroleum), solvent-dewaxed heavy paraffinic.
A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallisation. It consists of hydrocarbons, mainly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS @ 100°F (19 cSt @ 40°C).*

Exposure limit values exist for the following constituents: Mineral Oil

3. Hazards Identification

Thermia B Oil has a low coefficient of friction presenting a slip hazard. Not classified as dangerous for supply or conveyance, Thermia B Oil is a mineral oil, to which an exposure limit applies. Prolonged and repeated skin contact with mineral oil causes defatting of the skin and may give rise to skin conditions including dermatitis. The DMSO extract by IP 346 of the oil is less than 3%. Consequently, it is not classified as a carcinogen. Thermia B Oil does not biodegrade in anaerobic conditions and, hence, can be persistent. It contains components which have a high potential to bioaccumulate. Owing to its physical properties, spillages can lead to fouling of flora, fauna and the environment.

4. First Aid Measures

Inhalation:	Remove to fresh air. If rapid recovery does not occur, obtain medical attention.
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Skin contact:	<i>Does not normally require first aid, but oil soaked clothing should be removed, and contaminated skin washed with soap and water. If persistent irritation occurs, medical advice should be sought without delay.</i>
Eye contact:	<i>Flush the eye with copious amounts of water. If irritation persists seek medical attention.</i>
Ingestion:	<i>DO NOT INDUCE VOMITING. If ingestion is suspected, wash out the mouth with water and send to hospital immediately. Show this Data Sheet to the physician drawing attention to the "Notes for Doctors" in Section 11 below.</i>

5. Fire-Fighting Measures

Suitable extinguishing media:	<i>Foam, Water Fog, Dry Powder, AFFF, CO₂, Earth .</i>
Unsuitable extinguishing media:	<i>Never use a Water Jet.</i>

6. Accidental Release Measures

Personal precautions:	<i>Gloves should be worn.</i>
Environmental precautions:	<i>Prevent entry to drains or watercourses.</i>
Methods for cleaning:	<i>Soak up with a suitable medium, such as sand or earth. The liquid should be reclaimed directly or in an adsorbent medium and then transferred to suitable, clearly marked containers and disposed of in accordance with local byelaws and the requirements of the Environmental Protection Act, 1990.</i>

7. Handling and Storage

Handling:	<i>Does not require any special handling techniques, but it should be handled in suitable containers and spillage avoided.</i>
Storage:	<i>Not subject to any special controls or restrictions. Thermia B Oil should be stored in properly designed, closable, labelled containers, eg mild steel or high density polyethylene (HDPE).</i>

8. Exposure Controls

Occupational exposure limits:	<i>5 mg/cubic metre 8-hour TWA value. 15 mg/cubic metre 15-min TWA value.</i>
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Respiratory protection:	<i>Fumes arising from subjecting Thermia B Oil to high temperature are essentially an oil mist.</i>
Hand protection:	<i>Impervious gloves should be worn if regular contact is likely.</i>
Skin protection:	<i>Overalls should be worn if regular contact is likely.</i>
Eye protection:	<i>Goggles should be worn if there is a risk of splashing.</i>

9. Physical and Chemical Properties

Appearance:	<i>Pale amber / dark amber liquid @ ambient temperature.</i>
Odour:	<i>Characteristic, mineral oil.</i>
pH:	<i>Neutral.</i>
Boiling point:	<i>>200°C</i>
Melting point:	<i>N/A</i>
Flashpoint (°C):	<i>204°C</i>
Closed cup / open cup	<i>CC</i>
Flammability (gas/solid):	<i>N/A</i>
Autoflammability:	<i>Expected to be >320°C.</i>
Explosive properties:	<i>N/A</i>
Oxidising properties:	<i>N/A</i>
Vapour pressure:	<i>@20°C <0.1 k.Pa</i>
Relative density:	<i>@15°C 0.87</i>
Solubility (water and fat):	<i>Very low.</i>
Other:	<i>Partition Coefficient, n-octanol water: Expected to be >6.</i> <i>Vapour Density (Air = 1): >1</i> <i>Viscosity @ 40°C: 24.5 cSt.</i>

10. Stability and Reactivity

Conditions to avoid:	<i>Oil covered surfaces owing to the potential for slips.</i> <i>Accumulation of oily rags, owing to the potential for spontaneous ignition.</i> <i>Extremes of temperature. Store between 0 and 50°C.</i>
Materials to avoid:	<i>Strong oxidising agents, eg chlorates which may be used in agriculture.</i>

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Hazardous decomposition products: ***The substances arising from the thermal decomposition of these products will largely depend upon the conditions bringing about the decomposition. The following substances may be expected from normal combustion:***

CO, CO₂, H₂O, Particulate Matter, Polycyclic Aromatic Hydrocarbons, Unburnt Hydrocarbons, Unidentified Organic and Inorganic Compounds, Nitrogen Oxides.

11. Toxicological Information

Concise description of toxicological properties follows, including any special effects of constituents:

- Inhalation: ***Under normal conditions of use inhalation of vapours is not feasible or likely to present an acute hazard. Care should be taken to keep exposures below applicable occupational exposure limits by the use of general or local ventilation. If this cannot be achieved, use of a respirator fitted with an organic vapour cartridge, combined with a particulate prefilter.***
- Skin contact: ***Skin contact presents no acute health hazard except in the case of high pressure injection injuries. These can lead to the loss of the affected limbs if not treated immediately and properly. Avoid contact with the skin by the use of suitable protective clothing. Where skin contact is unavoidable, a high standard of personal hygiene must be practised. Extreme care must be exercised where the product is likely to be encountered at high pressures, when it is recommended that safe systems of work be employed.***
- Eye contact: ***May cause some discomfort. If there is a risk of splashing while handling the liquid, suitable eye protection should be used.***
- Ingestion: ***The main hazard following ingestion is of aspiration into the lungs during subsequent vomiting.***
- Chronic effects: ***Prolonged and repeated contact with oil products can be detrimental to health. The main hazards arise from skin contact and in the inhalation of mists. Skin contact under conditions of poor hygiene and over prolonged periods can lead to defatting of the skin, dermatitis, erythema, oil acne and oil folliculitis. Excessive and prolonged inhalation of oil mists may cause a chronic inflammatory reaction of the lungs and a form of pulmonary fibrosis.***

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Notes for
Doctors: **High Pressure injection injuries:**
High pressure injection injuries require surgical intervention and possibly steroid therapy to minimise tissue damage and loss of function. Because entry wounds are small and do not reflect the seriousness of the underlying damage, surgical exploration to determine the extent of involvement may be necessary. Local anaesthetics or hot soaks should be avoided because they can contribute to swelling, vasospasm and ischaemia. PROMPT surgical decompression, debridement and evacuation of foreign material should be performed under general anaesthetic, and wide exploration is essential.

Ingestion and aspiration of petroleum products:
There may be a risk to health where low viscosity products are aspirated into the lungs following vomiting, although this is uncommon in adults. Such aspiration would cause intense local irritation and chemical pneumonitis. Children, and those in whom consciousness is impaired, will be more at risk. Emesis of lubricants is not usually necessary, unless a large amount has been ingested, or some other compound has been dissolved in the product. If this is indicated - for example, when there is rapid onset of CNS depression from a large ingested volume - gastric lavage under controlled hospital conditions, with full protection of the airway is required. Supportive care may include oxygen, arterial blood gas monitoring, respiratory support and, if aspiration has occurred, treatment with corticosteroids and antibiotics. Seizures should be controlled with Diazepam, or appropriate equivalent drug.

12. Ecological Information

Air: **Thermia B Oil is a mixture of non-volatile components, which are not expected to be released to air in any significant quantities.**

Water: **If released to water, Thermia B Oil will form a floating layer on the surface and its component parts will not evaporate or dissolve to any great extent. Dissolved components will be absorbed in sediments. In aerobic water and sediments they will biodegrade slowly, but in anaerobic conditions they will persist. Thermia B Oil is practically non-toxic to aquatic organisms but contains components which have a high potential to bioaccumulate, and has the potential to physically foul aquatic organisms.**

Soil: **Small volumes released on land will be absorbed in the upper soil layers and be biodegraded slowly. Larger volumes may penetrate into anaerobic soil layers in which the product will persist and may reach the water table on which it will form a floating layer. The more soluble components may dissolve but their high soil absorption coefficient and the low solubility will prevent significant contamination of ground water.**

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13. Disposal Considerations

Likely residues/waste product (if any):

Thermia B Oil is a controlled waste and must be disposed of to a licensed waste contractor.

Safe handling of any residues/waste product:

***Not a hazardous product. If in doubt seek advice from your local authority.
The disposal of mineral oils to sewers, watercourses or land without consent of the Local Water Authority or the National Rivers Authority (NRA) is an offence under the Environmental Protection Act 1990 or the Water Resources Act 1991 or the Water Industry Act 1991.***

14. Transport Information

Special carriage precautions in carriage (on-site or externally):

N/A

Classification data:

Not dangerous for conveyance.

15. Regulatory Information

Supply label information:

Not dangerous for supply

Regulations:

This material has been classified according to the requirements of the Dangerous Substances Directive 67/548/EEC as last amended by the 8th Amendment 96/56/EC, the 22nd Adaptation to Technical Progress 96/54/EC and the Preparations Directive 88/379/EEC as last amended by the 4th Adaptation to Technical Progress 96/65/EC.

NOTE: THIS DATA SHEET DOES NOT CONSTITUTE A USER'S ASSESSMENT OF WORKPLACE RISK AS REQUIRED BY HSW ACT, COSHH, MANAGEMENT OF HEALTH AND SAFETY AT WORK REGULATIONS, OR OTHER HEALTH AND SAFETY LEGISLATION.

16. Other Information

Recommendations/restrictions:

The disposal of Thermia B Oil to soil, watercourses and drains is a legal offence.

Use:

An industrial heat transfer fluid.

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Sources of key data used to compile Safety Data Sheet:

Concawe Report 86/69 - Health Aspects of Worker Exposure to Oil Mists.
Concawe Report 01/97 - Petroleum Products - First Aid Emergency and Medical Advice.
Department of the Environment - Waste Management - The Duty of Care - A Code of Practice.
HS(G)71 - The storage of packaged dangerous substances.
EH/40 - Occupational Exposure Limits.
EH/58 - The Carcinogenicity of Mineral Oils.
MS24 - Health surveillance of occupational skin disease.

Abbreviations:

N/A: Not applicable.
N/E: Not established.
EINECS: European Inventory of Existing Commercial Chemical Substances.

The data contained in this Safety Data Sheet has been supplied as required by the Chemicals (Hazard Identification and Packaging) Regulations 1993, as amended, for the purpose of protecting the health and safety of industrial and commercial users who are deemed capable of understanding and acting on the information provided.

Please ensure that it is passed to the appropriate person(s) in your company, who are capable of acting on the information.