



MATERIAL SAFETY DATA SHEET

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Issue Date: 24th July 2012
Radiator Treatment
Version: 2

Product name: Radiator Treatment

1. COMPANY DETAILS AND PRODUCT IDENTIFICATION

COMPANY: Hi-Tec Oil Traders Pty Ltd. (ABN 28 053 837 362)
ADDRESS: PO Box 322 Castle Hill NSW 1765
5 Tarlington Place, Smithfield NSW 2164

TELEPHONE NUMBER: 1300 796 009
FAX NUMBER: (02) 9604 1611

EMERGENCY TELEPHONE NUMBER: 1300 796 009

PRODUCT NAME: Radiator Treatment

OTHER NAMES: None

MANUFACTURER'S PRODUCT CODE: HI8-3400-

USE: Corrosion inhibitor for the cooling systems of engines

ADDITIONAL INFORMATION: Refer to Product Information Sheet for additional information.

OTHER INFORMATION: Visit our website: www.hi-tecoils.com.au
Email: hitecoils@hi-tecoils.com.au

2. HAZARDS IDENTIFICATION

HAZARD CLASSIFICATION: HAZARDOUS SUBSTANCE
Irritant – Xi

NON-DANGEROUS GOODS

Hazard classification according to criteria of NOHSC.
Dangerous goods classification according to Australian Dangerous Goods Code.

RISK PHRASE: Irritant Xi.
R36/37/38 irritating to eyes, respiratory system and skin

SAFETY PHRASES S24, S25. Avoid contact with skin and eyes.
S26 in case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28 after contact with skin wash immediately with plenty of water
S27/39 wear suitable gloves and eye protection.
S45 in case of accident or if you feel unwell, seek medical advice immediately

IRRITANCY OF PRODUCT: Classified as an irritant.





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2. HAZARDS IDENTIFICATION (CONT)

SENSITISATION OF PRODUCT:	Not known to be a sensitiser.
TERATOGENICITY:	No teratogenic effects known.
OTHER INFORMATION:	Used fluids may contain harmful impurities that have accumulated during use. The concentration of such impurities will depend on use and they may present risks to health and environment on disposal. All used fluids should be handled with caution and skin contact avoided as far as possible.

3. IDENTIFICATION / COMPOSITION OF INGREDIENTS

CHEMICAL CHARACTERISTICS: Liquid

INGREDIENTS:-

CHEMICAL ENTITY:	CAS No.	PROPORTION
Tolytriazole	29385-43-1	<1%
Salts of Carboxylic acid	-	10-30%
Other ingredients determined not to be hazardous		to 100%

4. FIRST AID MEASURES

HEALTH EFFECTS

SWALLOWED:	If a large quantity is ingested seek immediate medical attention. Give water to drink. DO NOT induce vomiting. If vomiting occurs get immediate medical attention due to aspiration into lungs risk.
EYE:	Immediately irrigate with copious amounts of water for at least 15 minutes. Eyelids to be held open. In all cases of eye contamination it is a sensible precaution to seek medical advice.
SKIN:	Remove contaminated clothing and wash skin thoroughly with plenty of soap and water. High pressure injection through the skin requires URGENT medical attention for possible incision, irrigation and/or debridement. Contact with molten material will require treatment by a physician for burns (Do not remove material).
INHALED:	Remove victim from exposure to fresh air – avoid becoming a casualty. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist. If breathing laboured and patient cyanotic (blue), ensure airways are clear and have qualified person give oxygen through face mask. If breathing has stopped apply artificial respiration at once. In the event of cardiac arrest, apply external cardiac massage and seek urgent medical aid.
FIRST AID FACILITIES:	Normal washroom facilities are generally suitable. Ensure an eye wash station and safety shower is available and ready for use.
ADVICE TO DOCTOR:	Treat symptomatically.
OTHER INFORMATION:	Keep water and mild soap near work site.





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5. FIRE FIGHTING MEASURES

FIRE/EXPLOSION HAZARD

HAZARDS OF USE/STORAGE:	Product is not a flammable.
HAZARDS FROM COMBUSTION PRODUCTS:	There is no risk of an explosion from this product under normal circumstances if it is involved in a fire. Only small quantities of decomposition products are expected from this product at temperatures normally achieved in a fire. This will only occur after heating to dryness. Fire decomposition products from this product are generally oxides of carbon.
FIRE-FIGHTING RECOMMENDATIONS:	Not flammable. Use extinguishing media suited to burning materials.
SUITABLE EXTINGUISHING MEDIA:	Use water, foam, carbon dioxide or dry chemical to suit burning materials present.
PROTECTIVE MEASURES:	We suggest that protective clothing be made from the following materials: rubber, PVC.
REACTIVITY:	This product will not undergo polymerisation reactions.

6. ACCIDENTAL RELEASE MEASURES

SPIILLS & DISPOSAL:	Slippery when spilt. Avoid accidents, clean up immediately. CLEAN-UP PROCEDURE - SMALL SPILLS (20L or less): Minor spills do not normally need any special cleanup measures CLEAN-UP PROCEDURES - LARGE SPILLS (Greater than 20L): In the event of a major spill, prevent spillage from entering drains or water courses. PERSONAL PRECAUTIONS: As a minimum, wear overalls, goggles and gloves. Suitable materials for protective clothing include rubber, PVC. Eye/face protective equipment should comprise as minimum, protective glasses and, preferably, goggles. Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned below (section 8).
OTHER INFORMATION:	PROCEDURES IN CASES OF LEAKAGE OR BREAKAGE: Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. Can be slippery on floors, especially when wet. Recycle containers wherever possible after careful cleaning.





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6. ACCIDENTAL RELEASE MEASURES (CONT)

After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. This material may be suitable for approved landfill. Ensure legality of disposal by consulting regulations prior to disposal. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this MSDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

SAFE STORAGE CONDITIONS: Keep containers closed at all times. Store in a cool place out of direct sunlight. Check containers regularly for leaks.

CORROSIVENESS: Not corrosive.

STORAGE REGULATIONS: Store in a well ventilated place away from ignition sources, oxidising agents, foodstuffs and clothing.
Keep containers closed when not in use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

NATIONAL EXPOSURE STANDARDS: No exposure standard has been established for this product or its ingredients.

OTHER EXPOSURE INFORMATION: Exposure Standard means the average concentration of a particular substance in the worker's breathing zone, exposure to which, according to current knowledge, should not cause adverse health effects nor cause undue discomfort to nearly all workers. It can be of three forms; time-weighted average (TWA), peak limitation, or short term exposure limit (STEL).

ENGINEERING CONTROLS: Maintain concentration below recommended exposure limit. Special ventilation is not normally required. However, in the operation of certain equipment or at elevated temperatures mists or vapour may be generated and localised exhaust ventilation should be provided to maintain airborne concentration levels below the exposure standard or the Manufacturer's recommended exposure standard.

RESPIRATORY PROTECTION: A respirator is not normally required. Airborne concentrations should be kept at lowest level possible. If vapours, mists or dusts are generated and the recommended exposure limit for the product is exceeded, use appropriate AS/NZS 1715/1716 approved half-face filter respirator suitable for organic vapours or air supplied respirator are worn.





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8. EXPOSURE CONTROLS / PERSONAL PROTECTION (CONT)

Air supplied respirators should always be worn when the airborne concentration of the contaminant or the oxygen content of the air is unknown

EYE PROTECTION:	Safety glasses, goggles or face shield as appropriate.
HAND PROTECTION:	PVC gloves.
FOOTWEAR:	Enclosed footwear.
BODY PROTECTION:	Overalls or similar protective apparel.
HYGIENE MEASURES:	Always wash hands before eating, drinking, smoking or using the toilet. If contamination occurs, change clothing. Launder contaminated clothing before reuse. Discard internally contaminated gloves.
SPECIAL PROTECTIVE MEASURES:	The product will not burn. Isolate from sources of heat, naked flames or sparks.

9. PHYSICAL AND CHEMICAL PROPERTIES

FORM:	Liquid
APPEARANCE:	Pale Green liquid.
COLOUR:	Pale Green
ODOUR:	Slight
BOILING POINT:	N/A
pH value :	9.3 – 9.5
DENSITY @ 15°C (kg/L):	1.05 – 1.070
FLASHPOINT (ASTM D-93), Closed Cup:	Does not burn
FLAMMABILITY LIMITS -LOWER:	Does not burn
FLAMMABILITY LIMITS -UPPER:	Does not burn
FLAMMABILITY:	Does not burn
SOLUBILITY IN WATER:	Soluble.
SOLUBILITY IN ORGANIC SOLVENTS:	No data
VAPOUR PRESSURE:	No data
VAPOUR DENSITY (Air = 1):	No data





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9. PHYSICAL AND CHEMICAL PROPERTIES (CONT)

VISCOSITY @ 40 °C (mm ² /s):	No data
EVAPORATION RATE:	No data
AUTO-IGNITION TEMPERATURE:	Not applicable – does not burn
EXPLOSION PROPERTIES:	There is no risk of an explosion from this product under normal circumstances if it is involved in a fire.
OTHER INFORMATION:	These physical data and other properties do not constitute a specification.

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY:	Stable under normal conditions of use.
CONDITIONS TO AVOID:	Heat, direct sunlight.
INCOMPATIBLE MATERIALS:	Strong oxidisers
HAZARDOUS REACTIONS:	Only small quantities of decomposition products are expected from this product at temperatures normally achieved in a fire. This will only occur after heating to dryness. Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.
HAZARDOUS POLYMERISATION:	Will not occur.

11. TOXICOLOGICAL INFORMATION

TOXICOLOGY INFORMATION:	No toxicity studies have been carried out on this product
INHALATION:	Inhalation of mists or aerosols can produce respiratory irritation.
INGESTION:	May cause mild irritation of the mouth, throat and stomach with nausea and mild diarrhoea. Large amounts can cause vomiting which can lead to aspiration of vomited material into the lungs.
SKIN:	Contact with skin may result in moderate irritation.
EYE:	Contact with eyes may result in moderate irritation.
REPRODUCTIVE TOXICITY:	Product is not known to have damaging reproductive effects.
SENSITIZATION:	This product is not expected to be a sensitizer.





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11. TOXICOLOGICAL INFORMATION

CHRONIC EFFECTS: Prolonged or repeated exposure may result in irritation, with the possibility of dermatitis.

MUTAGENICITY: Mutagenic effects not known.

CARCINOGENICITY: None of the components of this product are listed as carcinogens.

12. ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: Product is classified as "readily" biodegradable according to the guidelines of the OECD.
Mobility: not determined
Bioaccumulation: this product is not expected to bioaccumulate

13. DISPOSAL CONSIDERATIONS

DISPOSAL CONSIDERATION: Containers should be emptied as completely as practical before disposal. If possible, recycle containers either in-house or send to recycle company. If this is not practical, send to a commercial waste disposal site. This product should be suitable for landfill. However, check with local Waste Disposal Authority before sending there. Note that product properties may have been changed in use, significantly altering its suitability for landfill. Please do NOT dispose into sewers or waterways.

14. TRANSPORT INFORMATION

TRANSPORT INFORMATION: Not classified as a Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

15. REGULATORY INFORMATION

POISON SCHEDULE: Not scheduled.

PACKING & LABELLING: No special packaging or labelling requirements.

AUSTRALIAN INVENTORY STATUS: All components are listed or exempted.

HAZARDOUS SUBSTANCE Irritant – Xi

RISK PHRASE: Irritant Xi.
R36/37/38 irritating to eyes, respiratory system and skin
SAFETY PHRASES:
S24, S25. Avoid contact with skin and eyes.
S26 in case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28 after contact with skin wash immediately with plenty of water
S27/39 wear suitable gloves and eye protection.
S45 in case of accident or if you feel unwell, seek medical advice immediately





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16. OTHER INFORMATION

CONTACT PERSON/POINT: General Manager 1300 796 009

This information was prepared in good faith from the best information available at the time of issue. It is based on the present level of research and to this extent we believe it is accurate. However, no guarantee of accuracy is made or implied and since conditions of use are beyond our control, all information relevant to usage is offered without warranty. The manufacturer will not be held responsible for any unauthorised use of this information or for any modified or altered versions.

If you are an employer it is your duty to tell your employees, and any others that may be affected, of any hazards described in this sheet and of any precautions that should be taken.

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

- LITERATURE REFERENCES:
- * NOHSC: 2011 National Code of Practice for the preparation of Material Safety Data Sheets.
 - * NOHSC: 1008 Approved Criteria for Classifying Hazardous Substances.
 - * NOHSC: 10005 List of Designated Hazardous Substances.
 - * NOHSC: 1005 Control of Workplace Hazardous Substances, National Code of Practice.
 - * NOHSC: 2007 Control of Workplace Hazardous Substances, National Code of Practice.

 - * NOHSC: 1003 Exposure Standards for Atmospheric Contaminants in the Occupational Environment, National Exposure Standards.
 - * NOHSC: 3008 Exposure Standards for Atmospheric Contaminants in the Occupational Environment, Guidance Note.

 - * NOHSC: 1015 Storage and Handling of Workplace Dangerous Goods, National Standard.
 - * NOHSC: 2017 Storage and Handling of Workplace Dangerous Goods, National Code of Practice.
 - * SUSDP: Standard for the Uniform Scheduling of Drugs and Poisons
 - * ADG: Australian Dangerous Goods Code
 - * MSDS of component materials.

LAST CHANGE: Supersedes document issued: 22 April 2009
Reason/s for revision: Editorial Changes.

END OF MSDS

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