

SAFETY DATA SHEET

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Product name:

Octane Booster

1. COMPANY DETAILS AND PRODUCT IDENTIFICATION

Hi-Tec Oil Traders Pty Ltd. (ABN 28 053 837 362) COMPANY: PO Box 322 Castle Hill NSW 1765 ADDRESS: 5 Tarlington Place, Smithfield NSW 2164 1300 796 009 **TELEPHONE NUMBER:** FAX NUMBER: (02) 9604 1611 EMERGENCY TELEPHONE NUMBER: 1300 796 009 PRODUCT NAME: Octane Booster OTHER NAMES: None MANUFACTURER'S PRODUCT CODE: HI8-3314 Petrol fuel additive USE: 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

STATEMENT OF HAZARDOUS NATURE:

This product is classified as:

Hazardous goods according to the criteria of NOHSC, and GHS Classification. Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail": TOXIC LIQUID, ORGANIC, NOS contains MMP (Methylcyclopentadienyl manganese tricarbonyl)

POISON SCHEDULE:



SIGNAL WORD:

DANGER

None allocated

GHS HAZARD CLASSIFICATION: FLAMMABLE LIQUID: ACUTE TOXICITY (ORAL):-

Category 4 Category 3







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2. HAZARDS IDENTIFICATION (CONT)

ACUTE TOXICITY (INHALATION):- ASPIRATION HAZARD:- SKIN CORROSION / IRRITATION: SPECIFIC TARGET ORGAN TOXICITY SINGLE EXPOSURE:	Category 4 Category 1 Category 2 Category 3 Respiratory tract
HAZARD STATEMENTS:	Combustible liquid. Toxic if swallowed. Harmful if inhaled. Causes skin irritation. May be fatal if swallowed and enters airways. May cause respiratory irritation.
PREVENTION PRECAUTIONARY STATEMENTS:	Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand. Wear protective gloves. Wear eye or face protection. Keep away from flames and hot surfaces. No smoking. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.
RESPONSE PRECAUTIONARY STATEMENTS:	 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call the POISON INFORMATION CENTER on 13 11 26 or physician if you feel unwell. IF SWALLOWED: Immediately call the POISON INFORMATION CENTER on 13 11 26 or physician. Rinse mouth. Do NOT induce vomiting. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical attention.
STORAGE PRECAUTIONARY STATEMENTS:	Store locked up. Store in a well-ventilated place. Keep cool.
DISPOSAL PRECAUTIONARY STATEMENT:	Dispose of contents/container in accordance with local, regional, national and international regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

DESCRIPTION:

Complex mixture of hydrocarbons consisting of paraffins, cycloparaffins, aromatic and olefinic hydrocarbons with carbon numbers predominantly in the C9 to C16 range. May also contain several additives at <0.1% v/v each. May contain cetane improver (Ethyl Hexyl Nitrate) at <0.2% v/v.







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3. COMPOSITION/INFORMATION ON INGREDIENTS (CONT)

CHEMICAL ENTITY Naptha petroleum, heavy aromatic hydrosulferised Methyl cyclopentadienyl manganese tricarbonyl CAS NO 64742-82-1 12108-13-3 PROPORTION >80% (w/w) <10% (w/w)

4. FIRST AID MEASURES

INHALATION:	Remove from further exposure. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with bag-valve-mask devise or use mouth-to-mouth resuscitation.	
SKIN CONTACT:	Wash contact areas with water. Remove contaminated clothing. Launder contaminated clothing before re-use.	
EYE CONTACT:	Immediately flush eyes with large amounts of water for at least 15minutes while holding eyelids open. Transport to the nearest medical facility for additional treatment.	
INGESTION:	Seek immediate medical attention. Do not induce vomiting.	
FIRST AID FACILITIES: Eye wash fountains and safety showers should be available for emergency use.		
ADVICE TO DOCTOR:	Material if aspirated into the lungs may cause chemical pneumonitis. Treat appropriately.	

5. FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA:	Foam, dry chemical powder, carbon dioxide and water fog
FIRE INCOMPATABILITY:	Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result
SPECIAL PROTECTIVE PRECAUTIONS AND EQUIPMENT FOR FIRE	5
FIGHTERS:	Use water to cool fire-exposed containers. If a leak or spill has not ignited, use water spray to disperse the vapours and to protect personnel attempting to stop leak. Water spray may be used to flush spills away from exposures. Prevent runoff from fire control or dilution from entering waterways, sewers or drinking water supply. For fires in enclosed areas, fire fighters must use self-contained breathing apparatus.
UNUSUAL FIRE AND/ EXPLOSION	
HAZARDS:	Carbon monoxide may be evolved if incomplete combustion occurs. The vapour is heavier than air, spreads along the ground and distant ignition is possible. Hazardous combustion products may include: oxides of sulphur.







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6. ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURE:Report spills as required to appropriate authorities such as local Environmental Health Officer
or Fire Brigade. If spills are likely to enter any drain, waterway or groundwater, contact the
Area Water Authority. In case of accident or road spill, contact police and fire brigade and if
appropriate, the Area Water Authority.SPILL/RELEASE PROCEDURE:Eliminate all ignition sources. Contain and adsorb on suitable chemical absorbent material,
etc. Shovel up and dispose of at an appropriate licensed waste disposal site in accordance with
current applicable laws and regulations and product characteristics at time of disposal.
Remove leaking containers to detached area.ENVIRONMENTAL PROCEDURES:Prevent spills from entering storm sewers or drains and contact with soil.

7. HANDLING AND STORAGE

GENERAL PRECAUTIONS:

Avoid breathing vapours or contact with material. Only use in well ventilated areas. Wash thoroughly after handling. For guidance on selection of personal protective equipment see Chapter 8 of this Safety Data Sheet. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material. Air-dry contaminated clothing in a well-ventilated area before laundering. Prevent spillages. Use local exhaust ventilation if there is risk of inhalation of vapours, mists or aerosols. Never siphon by mouth. Contaminated leather articles including shoes cannot be decontaminated and should be destroyed to prevent reuse. Maintenance and Fuelling Activities - Avoid inhalation of vapours and contact with skin.

PRECAUTIONS FOR SAFE	
HANDLING:	Avoid breathing of or contact with material. Use only in well ventilated areas. Wash
	thoroughly after handling. Avoid inhaling vapour and/or mists. Avoid contact with skin, eyes,
	and clothing. Electrostatic charges may be generated during pumping. Electrostatic discharge
	may cause fire. Ensure electrical continuity by bonding and grounding (earthing) all
	equipment. Restrict line velocity during pumping in order to avoid generation of electrostatic
	discharge (<= 1 m/sec until fill pipe submerged to twice its diameter, then <= 7 m/sec). Avoid
	splash filling. Do NOT use compressed air for filling, discharging, or handling operations.
	Vapours are heavier than air, beware of accumulation in pits and confined spaces. Extinguish
	any naked flames. Do not smoke. Remove ignition sources. Avoid sparks. Handling
	Temperature: Ambient.
	Koon containers aloged when not in use Do not use commenced air for filling discharging on

Keep containers closed when not in use. Do not use compressed air for filling, discharging or handling.







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7. HANDLING AND STORAGE (CONT)

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:

Keep away from aerosols, flammables, oxidizing agents, corrosives and from other flammable products which are not harmful or toxic to man or to the environment. Keep container tightly closed. Must be stored in a dyked (bunded), well- ventilated area, away from sunlight, ignition sources and any other sources of heat. Vapours from tanks should not be released to atmosphere. Breathing losses during storage should be controlled by a suitable vapour treatment system.

Containers, even those that have been emptied, can contain explosive vapours. Do not cut, drill, grind, weld or perform similar operations on or near containers

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

NATIONAL OCCUPATIONAL EXPOSURE LIMITS:

Material Naphtha petroleum, heavy aromatic hydrosulferised	<u>Source</u> SG OEL ACGIH ACGIH	<u>Type</u> TWA TWA SKIN_DES	<u>ppm</u> 15 No Limit	<u>mg/m³</u> 79 No Limit	Notation Can be absorbed
Methyl cyclopentadienyl manganesetricarbonyl (12108-13-3)	ACGIH NIOSH	TWA TWA		0.2 0.2	through the skin
BIOLOGICAL EXPOSURE INDEX (BEI):	No biological lir	nit allocated			
ENGINEERING CONTROLS					
VENTILATION:	vapours or mists inadequate, a fla storage and hanc Classification of	are generated, pa meproof exhaust dling of flammable	Examples of area	sed areas, and natu is required. Refer liquids and AS/N	ral ventilation is to AS 1940 - The ZS 2430.3.1:1997 :
APPROPRIATE ENGINEERING CONTROLS:	exposure conditi Appropriate mea concentrations b	ions. Select contro asures include: Ad elow the exposure	ols based on a risk lequate explosion-	assessment of loca proof ventilation t . Use sealed system	o control airborne ns as far as possible.







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Hi-Tec Oil Traders Pty Ltd ABN 28 053 837 362 5 Tarlington Place Smithfield NSW 2164 Correspondence: P.O Box 322 Castle Hill NSW 1765 Ph: 1300 796 009 | Fax: (02) 9604 1611 | Email: hitecoils@hi-tecoils.com.au

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION (CONT)

Where hand contact with the product may occur the use of gloves approved to relevant standardAS/NZS 2161 made from the following materials may provide suitable chemical protection: Longer term protection: Viton. Incidental contact/Splash protection: Nitrile rubber. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended.
Wear gloves of impervious material. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Reference should be made to AS/NZS 2161.1: Occupational Protective Gloves - Selection, use and maintenance.
Safety glasses with side shields, goggles or full-face shield as appropriate recommended. Final choice of appropriate eye/face protection will vary according to individual circumstances i.e. methods of handling or engineering controls and according to risk assessments undertaken. Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.
If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for organic gases and vapours [Type A boiling point > 65°C (149°F)] meeting EN14387. Where respiratory protective equipment is required, use a full-face mask. Where air-filtering respirators are unsuitable (e.g., airborne concentrations are high, risk of oxygen deficiency, confined space) use appropriate positive pressure breathing apparatus.
Chemical resistant gloves/gauntlets, boots, and apron. Where risk of splashing or in spillage clean up, use chemical resistant one-piece overall with integral hood. Wear antistatic and flame retardant clothing.
Smoking must be prohibited in all areas where this product is used - see safety information on flammability.
Not Applicable.







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8. EXPOSURE CONTROLS / PERSONAL PROTECTION (CONT)

GENERAL:

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate. Examples of sources of recommended exposure measurement methods are given below or contact the supplier.

Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapor.

9. PHYSICAL AND CHEMICAL PROPERTIES

FORM: Clear dark amber tobrownishliquid ODOUR: Hydrocarbon ODOUR THRESHOLD: Data not available pH: Data not available BOILING POINT/RANGE (°C): 175 - 340 FLASH POINTTAG CLOSED CUP (°C): >65 FLAMMABILITY LIMITS (%): No data available AUTOIGNITION TEMPERATURE (°C): No data available RELATIVE DENSITY (g/cm³): 0.810-0.820 WATER SOLUBILITY: Neglible SOLUBILITY IN OTHER SOLVENTS: Data not available n-OCTANOL / WATER PARTITION COEFFICIENT (log pow): Data not available DYNAMIC VISCOSITY: Data not available KINEMATIC VISCOSITY: Data not available VAPOUR DENSITY (AIR=1): No data available EVAPORATION RATE (nBu = 1)): Data not available TOTAL VOC (G/LITRE): Data not Available Stable under normal conditions. CHEMICAL STABILITY:







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10. STABILITY AND REACTIVITY CONDITIONS TO AVOID: Heat, sparks, light, flame and build-up of static electricity. INCOMPATIBLE MATERIALS: Strong oxidizers, Halogens, strong acids and alkalis. Do not allow molten material to contact water or liquids as this can cause violent eruptions, splatter hot material, or ignite flammable material. HAZARDOUS DECOMPOSITION PRODUCTS: Product does not decompose at ambient temperatures. Thermal decomposition is highly dependent on conditions. A complex mixture of airborne solids, liquids and gases including carbon monoxide, manganese oxides, and unidentified organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation. HAZARDOUS REACTIONS: Will not occur. 11. TOXICOLOGICAL INFORMATION BASIS FOR ASSESSMENT: Information given is based on product data, knowledge of the components and the toxicology of similar products. Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for ndividual component(s).

LIKELY ROUTES OF EXPOSURE: Exposure may occur via inhalation, ingestion, skin absorption, skin or eye contact, and accidental ingestion.

ACUTE ORAL TOXICITY: Toxic if swallowed. Dermal: Fatal in contact with skin. Inhalation: Fatal if inhaled. Inhalation:dust,mist: Not classified.

Methyl cyclopentadienyl manganese tricarbonyl (12108-13-3)

ATE US (oral)	58 mg/kg body weight
ATE US (dermal)	140 mg/kg body weight
ATE US (gases)	0.5 mg/l/4h
ATE US (gases)	0.124 ppmV/4h
ATE US (vapors)	0.5 mg/l/4h
ATE US (dust, mist)	0.05 mg/l/4h
LD50 oral rat	58 mg/kg
LD50 dermal rabbit	140 mg/kg
LC50 inhalation rat (mg/l)	76 mg/m ³ (Exposure time: 4
LC50 inhalation rat (ppm)	0.247 ppm/1h
SKIN CORROSION/IRRITATION:	Irritating to skin (mild)

RESPIRATORY OR SKIN/ SENSITATION:

RESPIRATORY IRRITATION:

ASPIRATION HAZARD:

Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.



AUSTRALIAN FAMILY OWNED SINCE 1989

There is no data available

Not expected to be a sensitiser.

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11. TOXICOLOGICAL INFORMATION (CONT)

MUTAGENICITY:

There is no data available.

CARCINOGENICITY: There is no data available.

REPRODUCTIVE AND DEVELOPMENTAL TOXICITY: Not expected to impair fertility. Not expected to be a developmental toxicant

 SPECIFIC TARGET ORGAN TOXICITY

 - SINGLE EXPOSURE:
 Category 3 Respiratory tract irritation.

ADDITIONAL INFORMATION: Classifications by other authorities under varying regulatory frameworks may exist.

12. ECOLOGICAL INFORMATION

TOXICITY:

There is no data available.

PERSISTENCE AND DEGRADABILITY: There is No data available.

BIOACCUMULATIVE POTENTIAL:

MOBILITY:

Spillages may penetrate the soil causing ground water contamination. This material may accumulate in sediments..

There is no evidence to suggest bioaccumulation will occur.

13. DISPOSAL CONSIDERATIONS

WASTE TREATMENT:

Dispose of waste according to federal, EPA, state and local regulations. Labels should not be removed from containers until they have been cleaned. Do not cut, puncture or weld on or near containers. Empty containers may contain hazardous residues. Containers must not be treated as household waste. Containers should be cleaned byappropriate methods and then re-used or disposed of by landfill or incineration as appropriate. Do not incinerate closed containers.

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".



PROPER SHIPPING NAME:

TOXIC LIQUID, ORGANIC, NOS (Contains Methylcyclopentadienyl manganese tricarbonyl

UN NO:

2810







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14. TRANSPORT INFORMATION (CONT)

DANGEROUS GOODS CLASS:	6.1
SUBSIDIARY RISK 1:	None allocated.
PACKING GROUP:	III
HAZCHEM CODE:	3Z
MARINE POLLUTANT:	Yes
SPECIAL PRECAUTIONS FOR USER:	Refer to incompatabilities in Sections 5 and 7 and stability and reactivity information in Section10.
ADDITIONAL TRANSPORT REQUIREMENTS:	Nil

MARINE TRANSPORT

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



PROPER SHIPPING NAME:	TOXIC LIQUID, ORGANIC, NOS (Contains Methylcyclopentadienyl manganese tricarbonyl
UN NO:	2810
DANGEROUS GOODS CLASS:	6.1
SUBSIDIARY RISK 1:	None allocated.
PACKING GROUP:	III
HAZCHEM CODE:	3Z
MARINE POLLUTANT:	Yes
SPECIAL PRECAUTIONS FOR USER:	Refer to incompatabilities in Sections 5 and 7 and stability and reactivity information in Section10.
ADDITIONAL TRANSPORT REQUIREMENTS:	Nil







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14. TRANSPORT INFORMATION (CONT)

AIR TRANSPORT

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



PROPER SHIPPING NAME:	TOXIC LIQUID, ORGANIC, NOS (Contains Methylcyclopentadienyl manganese tricarbonyl
UN NO:	2810
DANGEROUS GOODS CLASS:	6.1
SUBSIDIARY RISK 1:	None allocated.
PACKING GROUP:	III
HAZCHEM CODE:	3Z
MARINE POLLUTANT:	Yes
SPECIAL PRECAUTIONS FOR USER:	Refer to incompatabilities in Sections 5 and 7 and stability and reactivity information in Section10.
ADDITIONAL TRANSPORT REQUIREMENTS:	Nil

15. REGULATORY INFORMATION

AICS INVENTORY:

All ingredients are on listed the inventory

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.







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16. OTHER INFORMATION (CONT)

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 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 Drugs and Poisons * ADG: Australian Dangerous Goods Code * SDS of component materials.
LAST CHANGE:	Supersedes document issued: New document Reason/s for revision: Alignment to GHS requirements.
MR712032/1	

END OF SDS



