



43804

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# SPITFIRE OCTANE BOOST

## Material Safety Data Sheet

### SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

<b>Product Name</b>	Wynn's Spitfire Octane Boost
<b>Other Names</b>	43804 350 ml Methylcyclopentadienyl Manganese Tricarbonyl/SUSDP Schedule 6 Liquid Hydrocarbons / SUSDP Schedule 5
<b>Recommended Use</b>	Combustion catalyst for petrol engines
<b>Supplier Name</b>	Wynn's Australia Pty Ltd An (ITW), Illinois Tool Works Company ABN 73 000 370 150
<b>Address</b>	100 Hassall Street, Wetherill Park NSW 2164 Private Bag 35, Wetherill Park DC NSW 2164
<b>Telephone Number</b>	(02) 9828 0900 Email: <a href="mailto:wynnsaus@wynns.net">wynnsaus@wynns.net</a> Website: <a href="http://www.wynns.net">www.wynns.net</a>
<b>Emergency Phone Number</b>	(02) 9828 0900 Monday-Friday 8.00am – 5.00pm 13 11 26 (24 hours Australia) Poisons Information Centre (PIC) 0800 764 766 (New Zealand) Poisons Information Centre (PIC)

### SECTION 2 HAZARDS IDENTIFICATION

<b>Hazard Classification</b>	HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS. Classified as hazardous according to the criteria of NOHSC. Not Classified as Dangerous Goods according to the criteria of the ADG Code.
<b>Risk Phrase</b>	R 18 In use may form flammable/explosive vapour – air mixture R 21 Harmful in contact with skin. R 23 Toxic by inhalation. R 25 Toxic if swallowed. R 38 Irritating to skin. R 40 Possible risks of irreversible effects. R 65 Harmful: - may cause lung damage if swallowed.

**Safety Phrase**

S 1 Keep locked up.  
 S 2 Keep out of reach of children.  
 S 23 Do not breathe gas/fumes/vapour/spray.  
 S 36/37 Wear suitable protective clothing and gloves.  
 S 38 In case of insufficient ventilation wear suitable respiratory equipment.  
 S 51 Use only in well ventilated areas.  
 S 09 Keep container in a well ventilated place.  
 S 401 To clean the floor and all objects contaminated by this material use water and detergent.  
 S 07 Keep container tightly closed.  
 S 35 This material and its container must be disposed of in a safe way.  
 S 13 Keep away from food, drink and animal feeding stuffs.  
 S 27 Take off immediately all contaminated clothing.  
 S 57 Use appropriate container to avoid environment contamination.  
 S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.  
 S 63 In case of accident by inhalation: remove casualty to fresh air and keep at rest.

**SECTION 3****COMPOSITION/INFORMATION ON INGREDIENTS**

**Pure substances**

Not applicable – Mixture

**Mixtures**

Chemical Identity	CAS Number	Proportion
Kerosene, hydrodesulfurised	64742-81-0	>80%
Methylcyclopentadienyl Manganese Tricarbonyl	12108-13-3	<4%
naphthalene	91-20-3	<10%

**SECTION 4****FIRST AID MEASURES**

**Ingestion**

If swallowed, do NOT induce vomiting. If vomiting occurs, keep head below hips to help keep liquid from entering the lungs. For advice, contact a Poisons Information Centre or a doctor.

**Skin**

If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Wash affected area with soap and water.

**Eye**

If in eyes, flush with water for 15 minutes. If irritation persists, call for medical help.

**Inhalation**

Remove person to fresh air to avoid further inhalation. Apply artificial respiration if not breathing.

**First Aid Facilities**

Eye wash station.

**Advice to Doctor**

Aspiration into the lungs during ingestion or vomiting can result in severe pulmonary damage. Treat symptomatically.

## SECTION 5 FIRE FIGHTING MEASURES

<b>Suitable Extinguishing Media</b>	Dry chemicals, carbon dioxide, water spray and foam are recommended.
<b>Hazards From Combustion Products</b>	Thermal decomposition may produce oxides of carbon, sulphur and manganese.
<b>Precautions For Fire Fighters</b>	Combustible liquid. Avoid heat, flame or other sources of ignition. Vapours may be ignited by heat or flame. Containers exposed to heat from fire should be cooled with water to prevent vapour pressure build up.
<b>Special Protective Equipment</b>	Fire fighters should wear self contained breathing apparatus when hydrocarbons are involved in fire.
<b>Hazchem Code</b>	None allocated.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

<b>Emergency Procedures</b>	Isolate area and restrict entry. Eliminate all sources of ignition.
<b>Methods and Materials for Containment and Clean Up Procedures</b>	Use absorbent, sand or clay. Shovel into containers. Remove to outside. Prevent liquid from entering sewers and water ways. Dispose of in accordance with Federal, State and Local regulations.

## SECTION 7 HANDLING AND STORAGE

<b>Precautions for Safe Handling</b>	Keep away from heat and sparks. Do not breathe vapours. Keep containers closed. Keep out of reach of children.
<b>Conditions for Safe Storage</b>	Provide adequate ventilation. Do not store opened containers. Use entire contents.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

### National Exposure Standards

Name	ES-TWA	ES-STEL	ES-Peak
None established for product.	-	-	-

Established for ingredients

Mineral Oil Mist	5 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>	-
Methylcyclopentadienyl Manganese Tricarbonyl	0.2 mg/m <sup>3</sup>	-	-

<b>Alternative Standards</b>	Petroleum Oil Mist	OSHA (PEL)	5 mg/m <sup>3</sup>
		ACGIH (TLV-TWA)	5 mg/m <sup>3</sup>
	Manganese	OSHA (PEL)	5 mg/m <sup>3</sup>
		ACGIH (TLV-TWA)	0.2 mg/m <sup>3</sup> , skin

Contains no other ingredients now known to be hazardous as defined by OSHA 29CFR 1910.1000(z) and 29CFR 1910.1200. This material has not been identified as a carcinogen by NTP, IARC or OSHA.

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.

<b>Biological Limit Values</b>	No biological limit allocated.
<b>Engineering Controls</b>	Normal use, none required. Provide adequate general or local ventilation to maintain concentrations below ES / TLV / PEL limits.
<b>Personal Protective Equipment</b>	
<b>Respiratory Protection</b>	None required with normal application or use of product. If vapours exceed ES / TLV / PEL values, use a NIOSH approved respirator.
<b>Eye / Face Protection</b>	Use safety glasses.
<b>Skin Protection</b>	Chemical resistant gloves.
<b>Thermal Hazards</b>	None applicable.

## SECTION 9      PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Clear thin amber liquid
<b>Odour</b>	Petroleum distillate
<b>pH Value</b>	Not applicable
<b>Vapour Pressure</b>	< 1 mm Hg @ 20°C
<b>Vapour Density</b>	> 1 @ 20°C (air = 1)
<b>Boiling Point/Range</b>	> 190°C
<b>Freezing Point</b>	Not available
<b>Melting Point</b>	Not applicable
<b>Solubility</b>	Negligible in water
<b>Density</b>	0.828 @ 15°C
<b>Flash Point</b>	65°C (PMCC)
<b>Flammable Limits</b>	Not available
<b>Ignition Temperature</b>	Not available
<b>Volatiles</b>	2.5% volume

**SECTION 10 STABILITY AND REACTIVITY**

<b>Chemical Stability</b>	Stable
<b>Conditions to Avoid</b>	Heat, flame, or other sources of ignition. Avoid exposure to UV light, which can cause MMT to decompose.
<b>Incompatible Materials</b>	Strong oxidising agents.
<b>Hazardous Decomposition Products</b>	Thermal decomposition may produce oxides of carbon, sulphur and manganese.
<b>Hazardous Reactions</b>	Polymerization will not occur.

**SECTION 11 TOXICOLOGICAL INFORMATION**

<b>Toxicology Information</b>	Acute (MMT) Oral LD50 50 mg/kg bw (rat) Dermal LD50 140 mg/kg bw (rabbit) Inhalation LC50 220-247 mg/m <sup>3</sup> bw (rat, 1 hour); >2-76 mg/m <sup>3</sup> (rat, 4 hour) Repeat Dose (MMT) NOAEL (inhalation) 6.2 mg/ m <sup>3</sup> (rats and mice)
<b>Acute Health Effects</b>	
<b>Ingestion</b>	Ingestion of this material may cause vomiting. Aspiration into the lungs during ingestion or vomiting can result in severe pulmonary damage. Very toxic in animals by the oral route.
<b>Inhalation</b>	Inhalation of vapours or mist may cause mild irritation to the upper respiratory tract. High level exposure may result in central nervous system depression. Very toxic in animals via inhalation.
<b>Eye</b>	May cause irritation to eyes.
<b>Skin</b>	May cause irritation to skin. Prolonged or repeated contact can result in defatting and drying of skin. Acute toxicity studies in rats, rabbits and mice have shown MMT to induce damage to the lungs, kidney, liver and spleen effects, tremors, convulsions, dyspnea and weakness. In humans, the acute effects of MMT by skin or inhalation exposure are reported to be burning of the skin, a metallic taste in the mouth, "thick tongue", giddiness, headache, nausea, chest tightness, gastrointestinal upset, laboured breathing and abnormal sensation.
<b>Chronic Health Effects</b>	There are no human case reports or studies detailing symptoms resulting from prolonged exposure to MMT. However, at chronic low doses of MMT, neurological and psychological disturbances may occur due to exposure to manganese.

Methylcyclopentadienyl manganese tricarbonyl (MMT), which is known to be toxic by inhalation, ingestion and skin absorption. MMT may affect the lungs, kidney, liver, brain and central nervous system. Inhalation may cause headaches, dizziness and nausea. Kidney damage may result following aspiration pneumonitis.

**Ingestion**

In rats and mice, repeated oral exposure was associated with weight loss and mild neurological and developmental effects.

**Inhalation**

In rats and mice, repeated exposure via inhalation was associated with severe weight loss and death with degenerative changes in the lungs, liver and kidney.

**SECTION 12****ECOLOGICAL INFORMATION****Ecotoxicity****Environmental Data**

MMT is subject to rapid photochemical degradation in the atmosphere with a reported atmospheric half-life of 8-18 seconds.

MMT can adsorb to and become immobilised in soils reducing its potential for photo-degradation.

Degradation of MMT in dark, anaerobic aqueous environments is slow.

**Aquatic Toxicity**

MMT is toxic to aquatic organisms.

Daphnia Magna (4 and 48 hour EC50) 0.87 mg/L and 0.83 mg/L respectively.

Bluegill sunfish TLm (LC50) (12 h) 0.2 mg/L.

Flathead Minnow TLm (LC50) (12 h) 0.23 – 0.36 mg/L.

**Persistence/  
Degradability**

Not available.

**Mobility**

Not available.

**SECTION 13****DISPOSAL CONSIDERATIONS****Disposal Methods**

Dispose of waste according to federal, EPA, state and local regulations. Assure conformity with all applicable regulations.

**Special Precautions for  
Landfill or Incineration**

Material suitable for disposal by incineration or landfill through a approved agent.

<b>SECTION 14</b>	<b>TRANSPORT INFORMATION</b>
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<b>UN Number</b>	None.
<b>Proper Shipping Name</b>	Not regulated for Transport of dangerous goods: UN, IATA, IMDG.
<b>Class and Subsidiary Risk</b>	None
<b>Packing Group</b>	None
<b>Special Precautions for User</b>	None
<b>Hazchem Code</b>	None

<b>SECTION 15</b>	<b>REGULATORY INFORMATION</b>
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<b>Poisons Schedule</b>	Methylcyclopentadienyl Manganese Tricarbonyl/ Schedule 6 SUSDP No. 21 (2006).
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<b>SECTION 16</b>	<b>OTHER INFORMATION</b>
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**Acronyms**

ABN	Australian Business Number
ACGIH	American Conference of Governmental Industrial Hygienists
ADG	Australian Dangerous Goods
AICS	Australian Inventory of Chemical Substances
AS	Australian Standard
CAS	Chemical Abstracts Service (USA)
COC	Cleveland Open Cup
EPA	Environment Protection Agency (Australian States)
IARC	International Agency for Research on Cancer
IP	Institute of Petroleum (UK)
NIOSH	National Institute for Occupational Safety and Health (USA)
NOHSC	National Occupational Health and Safety Commission (Australia)
NTP	National Toxicology Program (USA)
NZS	New Zealand Standard
OSHA	Occupational Safety and Health Administration (USA)
PEL	Permissible Exposure Level
PMCC	Pensky – Martens Closed Cup
SCBA	Self-Contained Breathing Apparatus
STEL	Short Term Exposure Limit
SUSDP	Standard for the Uniform Scheduling of Drugs and Poisons (Australia)
TLV	Threshold Limit Value
TWA	Time Weighted Average
UN	United Nations

**Abbreviations**

cP	centiPoise
cSt	centiStoke
g	gram
Hg	Mercury
kPa	kiloPascal
L	litre
m <sup>3</sup>	cubic metre
mg	milligram
mL	millilitre
mm	millimetre
°C	degrees of temperature in Celsius (Centigrade)
%	percent(age)

**Note**

This form has been prepared in accordance with the National Code of Practice for the Preparation of Material Safety Data Sheets 2<sup>nd</sup> Edition [NOHSC:2011 (2003)] issued by the National Occupation Health and Safety Commission April 2003.

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**END OF MATERIAL SAFETY DATA SHEET**