



Section 1 - Identification of The Material and Supplier

Spectrum Brands Australia Pty Ltd ABN 78 007 070 573 **Phone:** 03 8551 5000 (office hours)
11 Chifley Drive
Mentone, VIC 3194

Chemical nature: Blend of liquid hydrocarbons.
Trade Name: **STP Octane Booster 354mL**
Product Use: Fuel additive for domestic uses.
Creation Date: **May, 2011**
This version issued: **November, 2016** and is valid for 5 years from this date.
Poisons Information Centre: Phone 13 1126 from anywhere in Australia

Section 2 - Hazards Identification

Statement of Hazardous Nature

This product is classified as: Xn, Harmful. T, Toxic. F, Flammable. Hazardous according to the criteria of SWA. Dangerous according to Australian Dangerous Goods (ADG) Code, IATA and IMDG/IMSBC criteria.

SUSMP Classification: S5

ADG Classification: Class 3: Flammable liquids.

UN Number: 1268, PETROLEUM DISTILLATES, N.O.S. or PETROLEUM PRODUCTS, N.O.S.



GHS Signal word: DANGER

HAZARD STATEMENT:

- H226: Flammable liquid and vapour.
- H304: May be fatal if swallowed and enters airways.
- H315: Causes skin irritation.
- H336: May cause drowsiness or dizziness.
- H351: Suspected of causing cancer.

PREVENTION

- P210: Keep away from heat, sparks, open flames and hot surfaces. - No smoking.
- P233: Keep container tightly closed.
- P243: Take precautionary measures against static discharge.
- P261: Avoid breathing fumes, mists, vapours or spray.
- P262: Do not get in eyes, on skin, or on clothing.
- P264: Wash contacted areas thoroughly after handling.
- P271: Use only outdoors or in a well ventilated area.
- P280: Wear protective gloves, protective clothing and eye or face protection.
- P281: Use personal protective equipment as required.

RESPONSE

- P312: Call a POISON CENTRE or doctor if you feel unwell.
- P362: Take off contaminated clothing and wash before reuse.
- P301+P310: IF SWALLOWED: Immediately call a POISON CENTRE or doctor.
- P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P302+P352: IF ON SKIN: Wash with plenty of soap and water.
- P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P308+P313: If exposed or concerned: Get medical advice.
- P332+P313: If skin irritation occurs: Get medical advice.
- P370+P378: Not combustible. Use extinguishing media suited to burning materials.

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**STORAGE**

P405: Store locked up.

P402+P404: Store in a dry place. Store in a closed container.

P403+P235: Store in a well-ventilated place. Keep cool.

DISPOSAL

P501: If they can not be recycled, dispose of contents to an approved waste disposal plant and containers to landfill (see Section 13 of this SDS).

Emergency Overview**Physical Description & Colour:** Clear, colourless to light amber mobile liquid.**Odour:** Hydrocarbon odour.**Major Health Hazards:** may cause cancer, may cause heritable genetic damage, if aspirated, may cause lung damage, repeated exposure may cause skin dryness or cracking.**Section 3 - Composition/Information on Ingredients**

Ingredients	CAS No	Conc,%	TWA (mg/m ³)	STEL (mg/m ³)
Kerosene	8008-20-6	<95	not set	not set
Naphthalene	91-20-3	<10	52	79
Solvent naphtha (petroleum), light arom.	64742-95-6	<10	not set	not set
2-ethylhexanol	104-76-7	<10	not set	not set
Methylcyclopentadienyl manganese tricarbonyl	12108-13-3	<4	0.2	not set
Proprietary additive	secret	<4	not set	not set
1,2,4-Trimethylbenzene	95-63-6	<3	not set	not set
Petroleum naphtha, heavy aromatic	64742-94-5	<3	not set	not set
Benzene, 1,3,5-trimethyl-	108-67-8	<2	not set	not set
Manganese cyclopentadienyl tricarbonyl	12079-65-1	<1	not set	not set
Ethylbenzene	100-41-4	<1	not set	not set

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

The SWA TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

Section 4 - First Aid Measures**General Information:**

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia and is available at all times. Have this SDS with you when you call.

Inhalation: First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.**Skin Contact:** Gently blot away excess liquid. Wash gently and thoroughly with water (use non-abrasive soap if necessary) for 5 minutes or until chemical is removed.**Eye Contact:** No effects expected. If irritation does occur, flush contaminated eye(s) with lukewarm, gently flowing water for 5 minutes or until the product is removed. Obtain medical advice if irritation becomes painful or lasts more than a few minutes. Take special care if exposed person is wearing contact lenses.**Ingestion:** If swallowed, do NOT induce vomiting. Wash mouth with water and contact a Poisons Information Centre, or call a doctor.**Section 5 - Fire Fighting Measures****Fire and Explosion Hazards:** The major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or both), fire gases. This product is classified as flammable. There is a moderate risk of an explosion from this product if commercial quantities are involved in a fire. Firefighters should take care and appropriate precautions. Any explosion will likely spread the fire to surrounding materials. Water spray may be used to cool drums involved in a**SAFETY DATA SHEET**



fire, reducing the chances of an explosion. Violent steam generation or eruption may occur upon application of direct water stream on hot liquids. Vapours from this product are heavier than air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures. They may also flash back considerable distances. Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

Extinguishing Media: Normal foam i.e. protein based foam that is not alcohol resistant, is the preferred medium for large fires. Try to contain spills, minimise spillage entering drains or water courses.

Fire Fighting: If a significant quantity of this product is involved in a fire, call the fire brigade. There is a danger of a violent reaction or explosion if significant quantities of this product are involved in a fire. Recommended personal protective equipment is full fire kit and breathing apparatus.

Flash point: 42°C, Closed cup

Upper Flammability Limit: 4.7%

Lower Flammability Limit: 0.6%

Autoignition temperature: No data.

Flammability Class: Flammable Category 3 (GHS); Flammable (AS1940)

Section 6 - Accidental Release Measures

Accidental release: This product is sold in small packages, and the accidental release from one of these is not usually a cause for concern. For minor spills, clean up, rinsing to sewer and put empty container in garbage. Although no special protective clothing is normally necessary because of occasional minor contact with this product, it is good practice to wear impermeable gloves when handling chemical products. In the event of a major spill, prevent spillage from entering drains or water courses and call emergency services.

Section 7 - Handling and Storage

Handling: Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this SDS 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.

Storage: This product is a Scheduled Poison. Observe all relevant regulations regarding sale, transport and storage of this schedule of poison. Store in a cool, well ventilated area, and make sure that surrounding electrical devices and switches are suitable. Check containers periodically for leaks. Containers should be kept closed in order to minimise contamination and possible evaporation. Make sure that the product does not come into contact with substances listed under "Incompatibilities" in Section 10. If you keep more than 10000kg or L of Dangerous Goods of Packaging Group III, you may be required to license the premises or notify your Dangerous Goods authority. If you have any doubts, we suggest you contact your Dangerous Goods authority in order to clarify your obligations. Check packaging - there may be further storage instructions on the label.

Section 8 - Exposure Controls and Personal Protection

The following Australian Standards will provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Occupational Protective Clothing: AS/NZS 4501 set 2008, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

SWA Exposure Limits	TWA (mg/m ³)	STEL (mg/m ³)
Naphthalene	52	79
Methylcyclopentadienyl manganese tricarbonyl	0.2	not set
Ethyl benzene	434	543

No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

Ventilation: No special ventilation requirements are normally necessary for this product. However make sure that the work environment remains clean and that vapours and mists are minimised.

Eye Protection: Eye protection such as protective glasses or goggles is recommended when this product is being used.

Skin Protection: You should avoid contact even with mild skin irritants. Therefore you should wear suitable impervious elbow-length gloves and facial protection when handling this product. See below for suitable material types.

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Protective Material Types: We suggest that protective clothing be made from the following materials: nitrile, neoprene.

Respirator: Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned above.

Safety deluge showers should, if practical, be provided near to where this product is being used.

Section 9 - Physical and Chemical Properties:

Physical Description & colour:	Clear, colourless to light amber mobile liquid.
Odour:	Hydrocarbon odour.
Boiling Point:	Not available.
Freezing/Melting Point:	No specific data. Liquid at normal temperatures.
Volatiles:	No specific data.
Vapour Pressure:	2.64 kPa at 70°C.
Vapour Density:	>1.
Specific Gravity:	0.77-0.92 at 16°C
Water Solubility:	Negligible.
pH:	No data.
Volatility:	No data.
Odour Threshold:	No data.
Evaporation Rate:	No data.
Coeff Oil/water Distribution:	No data
Autoignition temp:	No data.

Section 10 - Stability and Reactivity

Reactivity: This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.

Conditions to Avoid: This product should be kept in a cool place, preferably below 30°C. Keep containers tightly closed. Containers should be kept dry. Keep containers and surrounding areas well ventilated. Keep away from sources of sparks or ignition.

Incompatibilities: strong oxidising agents.

Fire Decomposition: Combustion forms carbon dioxide, and if incomplete, carbon monoxide and smoke. Water is also formed. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.

Polymerisation: This product will not undergo polymerisation reactions.

Section 11 - Toxicological Information

Ingredient

Risk Phrases

Methylcyclopentadienyl Manganese Tricarbonyl

>=1%Conc<3%: T; R23/25; R48/20

Toxicity: A summary of white spirit type hydrocarbons can be found at

<http://www.inchem.org/documents/ehc/ehc/ehc187.htm>

Ingestion of white spirit has been reported to produce gastrointestinal irritation with pain, vomiting and diarrhoea.

Lesions of the mucous membranes in the oesophagus and the gastrointestinal tract followed the oral exposure.

Owing to its low viscosity and low surface tension, white spirit poses a risk of aspiration into the lungs following oral exposure. A few ml of solvent aspirated into the lungs are able to produce serious bronchopneumonia and 10-30ml may be fatal.

Prolonged dermal exposure to white spirit, e.g., resulting from wearing clothes that have been soaked or moistened by white spirit for hours, may produce irritation and dermatitis.

Single cases of acute toxicity to the kidney, liver and bone marrow have been reported following exposure to white spirit at high levels. However, owing to lack of details and the sporadic nature of the reportings, the relevance of these findings is unclear.

Inhalation of aliphatic hydrocarbon vapours seems to show little toxicity but are CNS depressants and have a disinhibiting euphoric effect.

Product Calculated ATE:

LD₅₀ Oral: 1357 mg/kg

LD₅₀ Skin: 4093 mg/kg

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LC₅₀ Inhalation: 2.06 mg/L.

Hydro-sulfurized Kerosene:

LD₅₀ Oral Rat: >5000 mg/kg

LD₅₀ Skin Rabbit: >2000 mg/kg

LC₅₀ Inhalation Rat: >5.28 mg/L/4 hr.

Naphthalene:

LD₅₀ Oral Rat: 2200-2600 mg/kg

LD₅₀ Skin Rabbit >2000 mg/kg

Solvent naphtha (petroleum), light aromatic:

LD₅₀ Oral Rat: 3500 mg/kg

LD₅₀ Skin Rabbit: >3160 mg/kg

2-Ethyl hexanol:

LD₅₀ Oral Rat: 2047 mg/kg

LD₅₀ Skin Rabbit >3000 mg/kg

LC₅₀ Inhalation Rat: 5.3 mg/L/4 hr.

Methylcyclopentadienyl manganese tricarbonyl:

LD₅₀ Oral Rat: 51.8 mg/kg

LD₅₀ Skin Rabbit: 140 mg/kg

LC₅₀ Inhalation Rat: 0.076 mg/L/4 hr.

1,2,4-Trimethylbenzene:

LD₅₀ Oral Rat: 3280 mg/kg

LD₅₀ Skin Rabbit >3160 mg/kg

LC₅₀ Inhalation Rat: 18 mg/L/4 hr.

Manganese cyclopentadienyl tricarbonyl:

LD₅₀ Oral Rat: 22 mg/kg

LD₅₀ Skin Rabbit: 140 mg/kg

LC₅₀ Inhalation Rat: 0.076 mg/L/4 hr.

Ethylbenzene:

LD₅₀ Oral Rat: 3500 mg/kg

Potential Health Effects

Inhalation:

Short Term Exposure: Available data indicates that this product is not harmful. However product may be mildly irritating, although unlikely to cause anything more than mild transient discomfort.

Long Term Exposure: No data for health effects associated with long term inhalation.

Skin Contact:

Short Term Exposure: Available data indicates that this product is not harmful. It should present no hazards in normal use. However product may be irritating, but is unlikely to cause anything more than mild transient discomfort.

Long Term Exposure: Repeated exposure may cause skin dryness or cracking.

Eye Contact:

Short Term Exposure: This product may be irritating to eyes, but is unlikely to cause anything more than mild transient discomfort.

Long Term Exposure: No data for health effects associated with long term eye exposure.

Ingestion:

Short Term Exposure: Significant oral exposure is considered to be unlikely. Because of the low viscosity of this product, it may directly enter the lungs if swallowed, or if subsequently vomited. Once in the lungs, it is very difficult to remove and can cause severe injury or death. However, this product may be irritating to mucous membranes but is unlikely to cause anything more than transient discomfort.

Long Term Exposure: No data for health effects associated with long term ingestion.

Carcinogen Status:

SWA: No significant ingredient is classified as carcinogenic by SWA.

NTP: Naphthalene is classified by NTP as reasonably anticipated to be carcinogenic to humans.

See the NTP website for further details. A web address has not been provided as addresses frequently change.

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IARC: Naphthalene is classed 2b IARC - possibly carcinogenic to humans.

Ethyl Benzene is classed 2b IARC - possibly carcinogenic to humans.

See the IARC website for further details. A web address has not been provided as addresses frequently change.

Section 12 - Ecological Information

Insufficient data to be sure of status.

Biodegradation is expected to be the primary fate process for aliphatic hydrocarbons in soil and water. The rate and extent of biodegradation are dependent on the ambient temperature, the presence of a sufficient number of microorganisms capable of metabolizing the hydrocarbons and the concentration of white spirit in or on the soil or water.

Biodegradation of C₇ to C₁₂ hydrocarbons is expected to be significant under environmental conditions favourable to microbial oxidation. Naturally occurring hydrocarbon-degrading microorganisms have been isolated from polluted soil and, to a lesser extent, non-polluted soil.

The low water solubility and moderate vapour pressure of white spirit (Stoddard solvent) suggest that volatilization and subsequent photo-oxidation are important processes for abiotic degradation in the atmosphere.

The octanol/water partition coefficient (log Pow) of white spirit (17% v/v aromatics) has been found to be 3.5 to 6.4.

This indicates a moderate potential for bioaccumulation by organisms from water and a likelihood of partitioning to fat within organisms.

Hydro sulfurized Kerosene:

EL₅₀: *Daphnia Magna*: 1.4 mg/L/48 hr.

Naphthalene:

LC₅₀ *Oncorhynchus gorbuscha* (pink salmon) 1.4 mg/L/96

Solvent naphtha (petroleum), light aromatic:

LC₅₀: *Oncorhynchus mykiss* 9.22 mg/L/96 hr.

EC₅₀: *Daphnia Magna*: 6.14 mg/L/48 hr.

2-Ethyl hexanol:

LC₅₀: Fathead minnow *Pimephales promelas* 28.2mg/L/96hr

EC₅₀: *Daphnia Magna*: 39 mg/L/48 hr.

Methylcyclopentadienyl manganese tricarbonyl:

LC₅₀: *Cyprinus carpio* 0.21 mg/L/96 hr.

EC₅₀ *Daphnia*: 0.83 mg/L/48 hr.

1,2,4-Trimethylbenzene:

LC₅₀: *Oncorhynchus mykiss* 9.22 mg/L/96 hr.

EC₅₀ *Daphnia Magna*: 6.14 mg/L/48 hr.

Ethylbenzene:

LC₅₀ *Pimephales promelas* (fathead minnow) 14.4 mg/l /96 hr.

Persistence and Degradability:

Hydro sulfurized Kerosene: 58.6% in 28 days

Naphthalene: Reached 2% of its theoretical BOD in 4 weeks

2-Ethyl hexanol: Readily biodegradable

Methylcyclopentadienyl manganese tricarbonyl:

Less than 25% degradation occurred within 14 days.

Ethylbenzene: After a period of inocula adaptation, ethylbenzene is biodegraded fairly rapidly by sewage or activated sludge inoculua.

Bio accumulative Potential:

Naphthalene: BCF 23 to 146, these BCF values suggest the potential for bio concentration in aquatic organisms is low to high.

Ethylbenzene: BCF of 15.

Mobility in Soil:

Naphthalene: Is expected to have moderate to low mobility in soil.

Section 13 - Disposal Considerations

Disposal: Dispose of small quantities and empty containers by wrapping with paper and putting in garbage. For larger quantities, if recycling or reclaiming is not possible, use a commercial waste disposal service.

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Section 14 - Transport Information

Dangerous according to Australian Dangerous Goods (ADG) Code, IATA and IMDG/IMSBC criteria.

UN Number: 1268, PETROLEUM DISTILLATES, N.O.S. or PETROLEUM PRODUCTS, N.O.S.

Hazchem Code: 3Y

Special Provisions: 223

Limited quantities: ADG 7 specifies a Limited Quantity value of 5 L for this class of product.

Dangerous Goods Class: Class 3: Flammable liquids.

Packing Group: III

Packing Instruction: P001, IBC03, LP01

Class 3 Flammable Liquids shall not be loaded in the same vehicle or packed in the same freight container with Classes 1 (Explosives), 2.1 (Flammable Gases where flammable liquids and flammable gases are both in bulk), 2.3 (Toxic Gases), 4.2 (Spontaneously Combustible Substances), 5.1 (Oxidising Agents), 5.2 (Organic Peroxides), 6 (Toxic Substances, except Flammable Liquid is nitromethane), and 7 (Radioactive Substances). They may however be loaded in the same vehicle or packed in the same freight container with Classes 2.1 (Flammable Gases except where the Flammable Liquids and Flammable Gases are in bulk), 2.2 (Non-Flammable Non-Toxic Gases), 4.1 (Flammable Solids), 4.3 (Dangerous When Wet Substances), 6 (Toxic Substances, where Flammable Liquid is nitromethane), 8 (Corrosive Substances), 9 (Miscellaneous Dangerous Goods), Foodstuffs or foodstuff empties.

Section 15 - Regulatory Information

AICS: All of the significant ingredients in this formulation are compliant with NICNAS regulations.

The following ingredients: Kerosene, Solvent naphtha (petroleum), light arom., Naphthalene, 1,2,4-Trimethylbenzene, Benzene, 1,3,5-trimethyl-, Ethyl benzene, (all as liquid hydrocarbons) are mentioned in the SUSMP.

Section 16 - Other Information

This SDS contains only safety-related information. For other data see product literature.

Acronyms:

ADG Code	Australian Code for the Transport of Dangerous Goods by Road and Rail (7 th edition)
AICS	Australian Inventory of Chemical Substances
SWA	Safe Work Australia, formerly ASCC and NOHSC
CAS number	Chemical Abstracts Service Registry Number
Hazchem Code	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
IARC	International Agency for Research on Cancer
NOS	Not otherwise specified
NTP	National Toxicology Program (USA)
R-Phrase	Risk Phrase
SUSMP	Standard for the Uniform Scheduling of Medicines & Poisons
UN Number	United Nations Number

THIS SDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS SDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE.

IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS. OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

Please read all labels carefully before using product.

This SDS is prepared in accord with the SWA document "Preparation of Safety Data Sheets for Hazardous Chemicals - Code of Practice" (Feb 2016)

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