



1. Identification of Substance and Company

Product Name:	STP Octane Booster
Other Names:	none
HSNO Approval:	HSR002584, Fuel Additives (Flammable, Toxic [6.7]) Group Standard 2006
Product Code:	ST5745/6
UN Number:	1268
Proper Shipping name	PETROLEUM DISTILLATES, n.o.s. (contains kerosene)
DG class	3
Packaging group:	III
Hazchem Code:	3Y
Uses:	Additive to petrol tanks to improve anti-knock characteristics of fuel

Company Details

Company:	Spectrum Brands New Zealand Limited
Address:	Level one, 8 Hugo Johnson Drive, Penrose, 1061, Auckland, New Zealand
Telephone Number:	+64-9-571-7700
Emergency Telephone Number:	0800 764 766

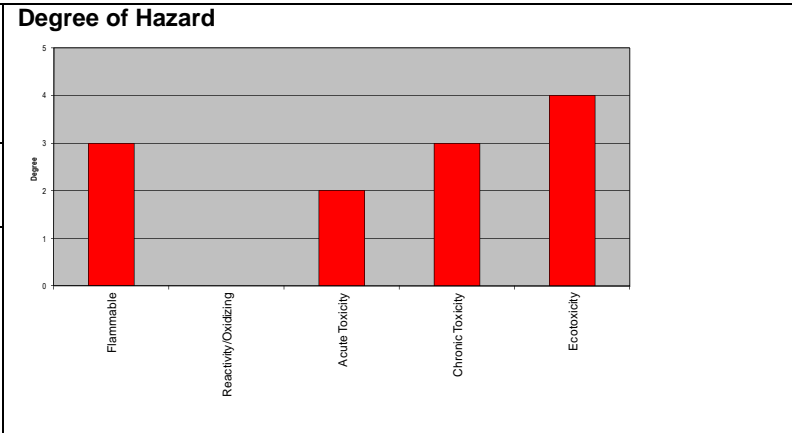
2. Hazard Identification

Hazard Classifications

This product has been approved under the Hazardous Substances and New Organisms Act (HSNO, Approval HSR002584, Fuel Additives (Flammable, Toxic [6.7]) Group Standard 2006), and is classified as follows:

Classes
3.1C, 6.1E (aspiration), 6.1D (oral, inhalation), 6.3A, 6.4A, 6.7B, 6.9B, 9.1B, 9.3C

Symbols:
DANGER



Other Classifications

There are no other Classifications that are known to apply.

Hazard and Precautionary Statements

Hazard Statements	Flammable liquid and vapour. May be harmful if swallowed and enters airways." Harmful if swallowed. Harmful if inhaled. Causes skin irritation. Causes eye irritation. Suspected of causing cancer Suspected of damaging fertility or the unborn child May cause damage to organs Toxic to aquatic life with long lasting effects. Harmful to terrestrial vertebrates.
Precautionary Statements	Read label before use. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep out of reach of children. Keep away from heat ignition sources. No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Take precautionary measures against static discharge. Use explosion-proof electrical equipment. Use only non-sparking tools. Store in a well-ventilated place. Keep cool. Wear protective gloves/eye/face protection. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area.



Do not breathe vapours.
Wash hands thoroughly after handling.
Avoid release to the environment. Collect spillage

Further precautionary statements can be found in Section 4 – First Aid.

3. Composition / Information on Ingredients

Component	CAS/ Identification	Conc (%)
Kerosene	8008-20-6	60-90%
Solvent naphtha (petroleum), light aromatic	64742-95-6	7-13%
Proprietary additive	proprietary	3-7%
1,2,4-Trimethylbenzene	95-63-6	1-5%
Methylcyclopentadienyl manganese tricarbonyl	12108-13-3	1-5%
Naphthalene	91-20-3	<3%
Petroleum naphtha, heavy aromatic	64742-94-5	0.5-2%
1,3,5-Trimethylbenzene	108-67-8	0.5-1.5%
Ethylbenzene	100-41-4	<0.2%
Xylene	1330-20-7	0.1-1%

This is a commercial product whose exact ratio of components may vary. Trace quantities of impurities are also likely.

4. First Aid

General Information

You should call the National Poisons Centre if you feel that you may have been harmed or irritated by this product. The number is 0800 764 766 (0800 POISON) (24 hr emergency service).

If medical advice is needed, have product container or label at hand. IF exposed or concerned: Get medical advice/ attention.

Recommended first aid facilities: Ready access to running water is required. Accessible eyewash is recommended.

Exposure

Swallowed: IF SWALLOWED: Do NOT induce vomiting. Rinse mouth. If vomiting occurs, place victim face downwards, with the head turned to the side and lower than the hips to prevent vomit entering the lungs.

Eye contact: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Apply continuous irrigation with water for at least 15 minutes holding eyelids apart. If eye irritation persists: Get medical advice.

Skin contact: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

Inhaled: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Advice to Doctor

Treat symptomatically

5. Firefighting Measures

Fire and Explosion Hazards Spray/Vapours may form an explosive mixture in air which can be ignited by many sources such as pilot lights, open flames, electrical motors, switches and static electricity. This product has the potential to cause fire or to create an additional hazard during fire. Flashpoint of mixture 60°C.

Suitable Extinguishing Substances Water fog, dry chemical foam, carbon dioxide (CO₂) or foam (preferred for large fires)

Unsuitable Extinguishing Substances None known

Protective Equipment When fighting fires involving significant quantities of this product, wear safety boots, non-flammable overalls, gloves, hat, goggles and self contained breathing apparatus. All skin areas should be covered.

Products of combustion Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Water.

Special precautions If a significant quantity of this product is involved in a fire, call the fire brigade. Immediately evacuate the area of unnecessary personnel. Ensure that no spillage enters drains or water courses.

Danger caused by material, its combustion products or gases produced Fire decomposition products from this product may form toxic mixtures in confined spaces. Vapours from this product are heavier than air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures.

Hazchem Code 3Y



6. Accidental Release Measures

Containment	If greater than 1000L is stored, secondary containment is required. Emergency plans to manage any potential spills must be in place. Prevent spillage from spreading or entering soil, waterways or drains.
Emergency procedures	The packaging generally will prevent major spills. Stop spill if safe/necessary. Shut off all possible sources of ignition. Prevent any spillage from entering drains and water courses. Evacuate spill area and deny entry to unnecessary and unprotected personnel Isolate area (ensure no unnecessary and unprotected persons inside spill area) Immediately call the Fire Brigade.
Clean-up method	Absorb onto sand, vermiculite or other suitable absorbent material. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage. 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. Dispose of only in accord with all regulations.
Disposal	Mop up and collect recoverable material into labelled containers for recycling or salvage. Recycle containers wherever possible. This material may be suitable for approved landfill. Dispose of only in accord with all regulations.
Precautions	Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Work up wind or increase ventilation.

7. Storage and Handling

Storage	Avoid storage of harmful substances with food. Store out of reach of children. Containers should be kept closed in order to minimise contamination. Keep from extreme heat and open flames. Avoid contact with incompatible substances as listed in Section 10. Also see controls in section 15.
Handling	Keep exposure to a minimum, and minimise the quantities kept in work areas. See section 8 with regard to personal protective equipment requirements. Avoid skin and eye contact and inhalation of vapour, mist or aerosols.

8. Exposure Controls / Personal Protective Equipment

Workplace Exposure Standards



A workplace exposure standard (WES) has not been established by WorkSafe NZ for this product. There is a general limit of 10mg/m³ for dusts and mists when limits have not otherwise been established.

NZ Workplace Exposure Standards (2016)	Ingredient	WES-TWA	WES-STEL
	Kerosene	no data	100ppm (NIOSH REL)
	Solvent naphtha (petroleum), light aromatic	100ppm, 525mg/m ³	no data
	1,2,4-Trimethylbenzene	25ppm, 123mg/m ³	no data
	Methylcyclopentadienyl manganese tricarbonyl	0.1mg/m ³	no data
	Naphthalene	10ppm, 52mg/m ³	15ppm, 79mg/m ³
	Petroleum naphtha, heavy aromatic	no data	no data
	1,3,5-Trimethylbenzene	25ppm, 123mg/m ³	no data
	Ethylbenzene	100ppm, 434mg/m ³	125ppm, 543mg/m ³
	Xylene	50ppm, 217mg/m ³	no data

Engineering Controls

In industrial situations, it is expected that employee exposure to hazardous substances will be controlled to a level as far below the WES as practicable by applying the hierarchy of control required by the Health and Safety at Work Act (2015) and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016. Exposure can be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high, you are advised to modify processes or increase ventilation.



<i>Personal Protective Equipment</i>	
Eyes 	Protect eyes with goggles, safety glasses or full face mask. Avoid wearing contact lenses.
Skin 	Protective gloves are recommended. Nitrile or neoprene gloves are recommended. Replace frequently. Gloves should be checked for tears or holes before use.
Respiratory	A respirator when airborne concentrations approach the WES (section 8). Use a organic vapour cartridge. If using a respirator, ensure that the cartridges are correct for the potential air contamination and are in good working order.
<i>WES Additional Information</i>	
Not applicable	
9. Physical & Chemical Properties	
Appearance	clear, visually free from haze, foreign matter, precipitates, and suspended matter
Odour	characteristic Hydrocarbon
pH	NA
Vapour Pressure	check
Boiling Point	no data
Volatile Materials	100%
Softening/Melting Point	no data
Solubility	not soluble
Specific Gravity or Density	0.84 at 16°C
Flash Point	60°C (closed cup)
Danger of Explosion	NA
Auto-Ignition Temperature	NA
Upper & Lower Flammable Limits	NA
Corrosiveness	non corrosive
10. Stability & Reactivity	
Stability	Stable
Conditions to be avoided	Flammable substance. Keep away from sources of ignition at all times. Containers should be kept closed in order to avoid contamination.
Incompatible Materials	Strong oxidising agents.
Hazardous Decomposition Products	Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Water.
Hazardous Reactions	none known
11. Toxicological Information	
<i>Summary</i>	
Ingestion of this mixture may product gastrointestinal irritation with pain, vomiting and diarrhoea. The hydrocarbon solvent (kerosene) poses a risk of aspiration into the lungs following oral exposure (bronchopneumonia) and aspiration of small amount may be fatal. Prolonged dermal exposure may result in severe irritant dermatitis. Inhalation of hydrocarbon vapours may result in systemic effects such as CNS depression. Symptoms may include dizziness, weakness, nausea, headaches, unconsciousness and/or death.	



<i>Supporting Data</i>		
Acute	Oral	Using LD ₅₀ 's for ingredients, the calculated LD ₅₀ (oral, rat) for the mixture is between 300 and 2000 mg/kg. Data considered includes: Kerosene >15000mg/kg (rat), Solvent naphtha (petroleum), light aromatic >15000mg/kg (rat), 1,2,4-Trimethylbenzene 3280 mg/kg (rat), Methylcyclopentadienyl manganese tricarbonyl 8mg/kg (rat), Naphthalene 490mg/kg (rat), Ethylbenzene 3500mg/kg (rat). This mixture does present an aspiration hazard.
	Dermal	Using LD ₅₀ 's for ingredients, the calculated LD ₅₀ (dermal, rat) for the mixture is >5000 mg/kg. Data considered includes: Kerosene >3160 mg/kg (rabbit), Solvent naphtha (petroleum), light aromatic >3160 mg/kg (rabbit), 1,2,4-Trimethylbenzene no data, Methylcyclopentadienyl manganese tricarbonyl 140mg/kg (rabbit), Naphthalene 1120 mg/kg (rabbit).
	Inhaled	Using LC ₅₀ 's for ingredients, the calculated LC ₅₀ (inhalation, rat) for the mixture is between 2500 and 5,000 mg/L. Data considered includes: Kerosene >12mg/L (rat), Solvent naphtha (petroleum), light aromatic >12mg/L (rat), 1,2,4-trimethylbenzene 18mg/l (4h, rat), methylcyclopentadienyl manganese tricarbonyl 76mg/m ³ /4h (rat), Ethylbenzene 9.6mg/L (vapour, rat).
	Eye	The mixture is considered to be an eye irritant, because some of the ingredients present are considered eye irritants in more concentrated form. (1,2,4-trimethylbenzene, naphthalene, 1,3,5-trimethylbenzene).
	Skin	The mixture is considered to be a skin irritant, because some of the ingredients present are considered skin irritants in more concentrated form. (Kerosene)
Chronic	Sensitisation	No ingredient present at concentrations > 0.1% is considered a sensitizer.
	Mutagenicity	No ingredient present at concentrations > 0.1% is considered a mutagen.
	Carcinogenicity	The mixture is considered to be a suspected carcinogen, because at least one of the ingredients present in greater than 0.1% is suspected to be a carcinogen. Naphthalene and ethyl benzene are classed by IARC as Group 2B - <i>possibly carcinogenic to humans</i> .
	Reproductive / Developmental	The mixture is considered to be a suspected reproductive or developmental toxicant, because at least one of the ingredients (Xylene, Ethyl benzene) present in greater than 0.1% is suspected to be a reproductive or developmental toxicant.
	Systemic	The mixture is considered to be a suspected target organ toxicant, because at least one of the ingredients present in greater than 1% is suspected to be a target organ toxicant (Methylcyclopentadienyl manganese tricarbonyl).
	Aggravation of Existing Conditions	None known.
12. Ecological Data		
<i>Summary</i>		
No specific data is available for this product. Where available, ecotoxicological data has been researched and data for the mixture calculated. The results of these calculations are presented below. The product is considered to have the following ecotoxicity groups:		
<i>Supporting Data</i>		
Aquatic		Using EC ₅₀ 's for ingredients, the calculated EC ₅₀ for the mixture is between 1 mg/L and 10 mg/L and at least one of the components is either bioaccumulative or persistent in the aquatic environment. Data considered includes: Kerosene 2.6 mg/L (96hr, Crustacea), , Solvent naphtha (petroleum), light aromatic 2.6 mg/L (96hr, Crustacea), 1,2,4-Trimethylbenzene 7.72mg/L (96hr, Pimephales promelas (fathead minnow)), 17mg/L (48hr, Cancer magister), Naphthalene 0.4mg/L (72hr, Skeletonema costatum (Algae)), 2.16L (48hr, Daphnia magna (Crustacea)), 1.2 mg/L (96hr, Oncorhynchus gorbuscha Pink salmon).
Bioaccumulation		No data
Degradability		not readily biodegradable
Soil		No evidence of soil toxicity.
Terrestrial vertebrate		The mixture is considered to be harmful to terrestrial vertebrates. See oral toxicity.
Terrestrial invertebrate		No evidence of toxicity towards terrestrial invertebrates.
Biocidal		no data



13. Disposal Considerations			
Restrictions	There are no product-specific restrictions, however, local council and resource consent conditions may apply, including requirements of trade waste consents. Disposal of this product must comply with the requirements of the Resource Management Act for which approval should be sought from the Regional Authority. The substance must be treated and therefore rendered non-hazardous before discharge to the environment. Rinse containers with water before disposal. Preferably re-cycle container, otherwise send to landfill or similar.		
Disposal Method			
Contaminated Packaging			
14. Transport Information			
Transport according to NZS 5433 (Transport of Hazardous Substances on Land). Considered a dangerous good for transport.			
UN Number	1268	Proper Shipping Name	PETROLEUM DISTILLATES n.o.s. (contains kerosene)
Class(es)	3	Packing Group	III
Precautions	Flammable, Marine pollutant	HAZCHEM Code	3Y
15. Regulatory Information			
This product is an approved substance under the Hazardous Substances and New Organisms Act (HSNO). Approval code: HSR002584, Fuel Additives (Flammable, Toxic [6.7]) Group Standard 2006.			
<i>Specific Workplace Controls (as per HSNO approval referenced to Controls Matrix)</i>			
Key workplace requirements are:			
SDS	To be available within 10 minutes in workplaces storing > any quantity.		
Labelling	No removal of labels and/or decanting of product into other containers can occur.		
Emergency plan	Required if > 1000L is stored.		
Approved handler	Not required.		
Tracking	Not required.		
Bunding & secondary containment	Required if > 1000L is stored.		
Signage	Required if > 1000L is stored.		
Location test certificate	Required if > for containers <5L, >1500L (closed containers) or 250L (open) is stored in any one location.		
Flammable zone	Must be established if > 100 L (closed containers), 25 L (decanting), 5 L (open occasionally), 1 L (open containers in continuous use) is stored in any one location.		
Fire extinguisher	If > 500 L present.		
Note: The above workplace requirements apply if only this particular substance is present. The complete set of controls for a location will depend on the classification and total quantities of other substances present in that location.			
<i>Other Legislation</i>			
In New Zealand, the use of this product may come under the Resource Management Act and Regulations, the Health and Safety at Work Act 2015 and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016, local Council Rules and Regional Council Plans.			



16. Other Information	
<i>Abbreviations</i>	
Approval Code	Approval HSR002584, Fuel Additives (Flammable, Toxic [6.7]) Group Standard 2006 Controls, EPA. www.epa.govt.nz
CAS Number	Unique Chemical Abstracts Service Registry Number
Ceiling	Ceiling Exposure Value: The maximum airborne concentration of a biological or chemical agent to which a worker may be exposed at any time.
Controls Matrix	List of default controls linking regulation numbers to Matrix code (e.g. T1, I16).
EC50	Ecotoxic Concentration 50% – concentration in water which is fatal to 50% of a test population (e.g. daphnia, fish species)
EPA	Environmental Protection Authority (New Zealand)
HAZCHEM Code	Emergency action code of numbers and letters that provide information to emergency services, especially fire fighters
HSNO	Hazardous Substances and New Organisms (Act and Regulations)
IARC	International Agency for Research on Cancer
LEL	Lower Explosive Limit
LD50	Lethal Dose 50% – dose which is fatal to 50% of a test population (usually rats).
LC50	Lethal Concentration 50% – concentration in air which is fatal to 50% of a test population (usually rats)
MSDS/SDS	Material Safety Data Sheet (or Safety Data Sheet)
PES	Prescribed Exposure Standard means a WES or a biological exposure standard that is prescribed in a regulation, a safe work instrument or an approval under HSNO (including group standards).
STEL	Short Term Exposure Limit - The maximum airborne concentration of a chemical or biological agent to which a worker may be exposed in any 15 minute period, provided the TWA is not exceeded
TWA	Time Weighted Average – generally referred to WES averaged over typical work day (usually 8 hours)
UEL	Upper Explosive Limit
UN Number	United Nations Number
WES	Workplace Exposure Standard - The airborne concentration of a biological or chemical agent to which a worker may be exposed during work hours (usually 8 hours, 5 days a week). The WES relates to exposure that has been measured by personal monitoring using procedures that gather air samples in the worker's breathing zone.
<i>References</i>	
Data	Unless otherwise stated comes from the EPA HSNO chemical classification information database (CCID).
WES 2016	The NZ Workplace Exposure Standards Effective from 2016, published by WorkSafe NZ and available on their web site – www.worksafe.govt.nz .
WES 2002	Workplace Exposure Standards published by the Occupational Safety and Health Service, Department of Labour, January 2002, ISBN 0-477-03660-0. These are the WES referred to under the Group Standard (HSNO approval) and may constitute a PES.
Other References:	Chemidplus.
<i>Review</i>	
Date	Reason for Review
May 2012	New SDS
November 2016	Change of logo, HSE to HSAW, formatting.
<i>Disclaimer</i>	
This SDS was prepared by Datachem LTD and is based on our current state of knowledge, including information obtained from suppliers. The SDS is given in good faith and constitutes a guideline (not a guarantee of safety). The level of risk each substance poses is relevant to its properties (as summarised in the SDS) AND HOW THE SUBSTANCE IS USED. While guidelines are given for personal protective equipment, such precautions must be relevant to the use. The likely HSNO classifications, are based on our experience, EPA Guidelines and international classifications. This SDS is copyright Datachem and must not be copied, edited or used for other than intended purpose. To contact the SDS author, email info@datachem.co.nz or phone: (09) 940 30 80.	