Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

HP OCTANE SUPREME

PROPER SHIPPING NAME

FLAMMABLE LIQUID, N.O.S.(contains aromatic hydrocarbon solvent)

PRODUCT USE Used according to manufacturer's directions.

SUPPLIER

Company: Austech Chemicals Pty Ltd Address: 45 Magnesium Street Narangba QLD, 4504 Australia Telephone: +61 73 204 8511 Fax: +61 73 204 8522 Email: nicholas@auschem.com

Section 2 - HAZARDS IDENTIFICATION

STATEMENT OF HAZARDOUS NATURE HAZARDOUS SUBSTANCE. DANGEROUS GOODS. According to the Criteria of NOHSC, and the ADG Code.

RISK **Risk Phrases Risk Codes** R10 • Flammable. R23/24/25 · Toxic by inhalation, in contact with skin and if swallowed. R33 · Danger of cumulative effects. R36/37/38 • Irritating to eyes, respiratory system and skin. R51/53 Toxic to aquatic organisms, may cause long- term adverse effects in the aquatic environment. • May cause harm to the unborn child. R61(1) • HARMFUL- May cause lung damage if swallowed. R65 R67 · Vapours may cause drowsiness and dizziness. SAFETY Safety Phrases Safety Codes S01 · Keep locked up. · Do not breathe gas/fumes/vapour/spray. S23 S24 Avoid contact with skin. S25 · Avoid contact with eyes. S36 · Wear suitable protective clothing. S38 · In case of insufficient ventilation, wear suitable respiratory equipment. · Wear suitable gloves. S37 S39 · Wear eye/face protection. • Use only in well ventilated areas. S51 Keep container in a well ventilated place. S09 · Avoid exposure - obtain special instructions before use. S53 • Do not empty into drains. S29 • To clean the floor and all objects contaminated by this material, use water S401 and detergent. · Keep container tightly closed. S07 S35 • This material and its container must be disposed of in a safe way. S13 · Keep away from food, drink and animal feeding stuffs. • Take off immediately all contaminated clothing. S27 S26 · In case of contact with eyes, rinse with plenty of water and contact Doctor or Poisons Information Centre. · Use appropriate container to avoid environmental contamination. S57 · Avoid release to the environment. Refer to special instructions/Safety data S61

	sheets.
S60	 This material and its container must be disposed of as hazardous waste.
S62	 If swallowed do not induce vomiting: seek medical advice immediately and show this container or label.
S63	 In case of accident by inhalation: remove casualty to fresh air and keep at rest.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
aromatic hydrocarbon solvent	64742-95-6.	>60
tetraethyl lead	78-00-2	<2
ethylene dibromide	106-93-4	<1
ethylene dichloride	107-06-2	<1
dye		<1

Section 4 - FIRST AID MEASURES

SWALLOWED

If swallowed do NOT induce vomiting.

- If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.

- Observe the patient carefully.

- Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.

- Avoid giving milk or oils.

- Avoid giving alcohol.

- If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.

EYE

If this product comes in contact with the eyes:

- Immediately hold eyelids apart and flush the eye continuously with running water.

- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.

- Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.

- Transport to hospital or doctor without delay.

SKIN

If skin or hair contact occurs:

- Quickly but gently, wipe material off skin with a dry, clean cloth.

- Immediately remove all contaminated clothing, including footwear.

- Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre.

- Transport to hospital, or doctor.

If this product comes in contact with the skin:

- Avoiding further contact, strip off contaminated clothing, including footwear.

- Wipe any lead alkyl from the skin with rags, flush skin with kerosene or diesel fuel if available, followed by thorough washing

with soap and water for at least 15 minutes. (Burn any rags used or contaminated clothing)

- All contaminated clothing should be destroyed.

INHALED

■ - If fumes or combustion products are inhaled remove from contaminated area.

- Lay patient down. Keep warm and rested.

- Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.

- Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.

NOTES TO PHYSICIAN

■ Any material aspirated during vomiting may produce lung injury. Therefore emesis should not be induced mechanically or pharmacologically.

For acute or short term repeated exposures to xylene:

- Gastro-intestinal absorption is significant with ingestions. For ingestions exceeding 1-2 ml (xylene)/kg, intubation and lavage with cuffed endotracheal tube is recommended. The use of charcoal and cathartics is equivocal.

- Pulmonary absorption is rapid with about 60-65% retained at rest.
- Primary threat to life from ingestion and/or inhalation, is respiratory failure.

- Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnoea, intercostal retraction,

obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases (pO2 < 50 mm Hg or pCO2 > 50 mm Hg) should be intubated.

- Gastric acids solubilise lead and its salts and lead absorption occurs in the small bowel.

- Particles of less than 1 um diameter are substantially absorbed by the alveoli following inhalation.

- Lead is distributed to the red blood cells and has a half-life of 35 days. It is subsequently redistributed to soft tissue & bone-stores or eliminated. The kidney accounts for 75% of daily lead loss; integumentary and alimentary losses account for the remainder.

- Neurasthenic symptoms are the most common symptoms of intoxication. Lead toxicity produces a classic motor neuropathy. Acute encephalopathy appears infrequently in adults. Diazepam is the best drug for seizures.

Section 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

Water spray or fog.
 Foam

Dry powder or BCF extinguishers are unsuitable and should NOT be used on lead alkyl fires.

FIRE FIGHTING

Alert Fire Brigade and tell them location and nature of hazard.

- May be violently or explosively reactive.

- Wear breathing apparatus plus protective gloves.

- Prevent, by any means available, spillage from entering drains or water course.

FIRE/EXPLOSION HAZARD

Liquid and vapour are flammable.

- Moderate fire hazard when exposed to heat or flame.

- Vapour forms an explosive mixture with air.

- Moderate explosion hazard when exposed to heat or flame.

Combustion products include: carbon monoxide (CO), carbon dioxide (CO2), other pyrolysis products typical of burning organic material.

May emit clouds of acrid smoke.

FIRE INCOMPATIBILITY

- Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.

HAZCHEM

•3Y

Section 6 - ACCIDENTAL RELEASE MEASURES

MINOR SPILLS

Remove all ignition sources.

- Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Control personal contact with the substance, by using protective equipment.

MAJOR SPILLS

- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.
- May be violently or explosively reactive.
- Wear breathing apparatus plus protective gloves.

Personal Protective Equipment advice is contained in Section 8 of the MSDS.

Section 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING

- Containers, even those that have been emptied, may contain explosive vapours.
- Do NOT cut, drill, grind, weld or perform similar operations on or near containers.
- DO NOT allow clothing wet with material to stay in contact with skin.
- Electrostatic discharge may be generated during pumping this may result in 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.
- Avoid all personal contact, including inhalation. - Wear protective clothing when risk of overexposure occurs.
- Use in a well-ventilated area.
- Prevent concentration in hollows and sumps.

SUITABLE CONTAINER

Packing as supplied by manufacturer.

- Plastic containers may only be used if approved for flammable liquid.
- Check that containers are clearly labelled and free from leaks.

STORAGE INCOMPATIBILITY

Lead alkyls:

- react with active metals and rust.

- react violently with strong oxidisers, halogens, concentrated acids sulfuryl chloride, potassium permanganate,

tetrachlorotrifluoromethylphosphorane

- may react violently with aluminium metal or its alloys

- decompose in water forming alkyl salts, inorganic lead salt.

- Vigorous reactions, sometimes amounting to explosions, can result from the contact between aromatic rings and strong oxidising agents.

- Aromatics can react exothermically with bases and with diazo compounds.

For alkyl aromatics:

The alkyl side chain of aromatic rings can undergo oxidation by several mechanisms. The most common and dominant one is the attack by oxidation at benzylic carbon as the intermediate formed is stabilised by resonance structure of the ring.

- Following reaction with oxygen and under the influence of sunlight, a hydroperoxide at the alpha-position to the aromatic ring,

is the primary oxidation product formed (provided a hydrogen atom is initially available at this position) - this product is often short-lived but may be stable dependent on the nature of the aromatic substitution: a secondary C-H bond is more easily

attacked than a primary C-H bond whilst a tertiary C-H bond is even more susceptible to attack by oxygen

- Monoalkylbenzenes may subsequently form monocarboxylic acids; alkyl naphthalenes mainly produce the corresponding naphthalene carboxylic acids.

STORAGE REQUIREMENTS

Laboratory containers, -containing lead alkyls, should be stored in a lockable fume cupboard constructed of non-absorbent materials.

Drums- of lead alkyls should be stored on a drained concrete pad which should be kept clean and free from obstruction. Portable tanks or bulk containers of lead alkyl should be unloaded into purpose-built, bunded horizontal or vertical bulk storage tanks fitted with a permanent sprinkler system.

- Store in original containers in approved flammable liquid storage area.

- Store away from incompatible materials in a cool, dry, well-ventilated area.
- DO NOT store in pits, depressions, basements or areas where vapours may be trapped.

- No smoking, naked lights, heat or ignition sources.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

Source	Material	TWA ppm	TWA mg/m³	Notes
Australia Exposure Standards	HP Octane Supreme (Petrol (gasoline))		900	(see Chapter 16)
Australia Exposure Standards	HP Octane Supreme (Tetraethyl lead (as Pb))		0.1	Sk
Australia Exposure Standards	HP Octane Supreme (Éthylene dichloride)	10	40	

MATERIAL DATA

AROMATIC HYDROCARBON SOLVENT:

HP OCTANE SUPREME:

For trimethyl benzene as mixed isomers (of unstated proportions)

Odour Threshold Value: 2.4 ppm (detection)

Use care in interpreting effects as a single isomer or other isomer mix. Trimethylbenzene is an eye, nose and respiratory irritant.

ETHYLENE DICHLORIDE:

HP OCTANE SUPREME:

for ethylene dichloride:

Odour Threshold Value: 6-111 ppm (detection), 41-185 ppm (recognition)

Exposure at or below the TLV-TWA is thought to minimise the potential for hepatotoxic or narcotic effects. The NIOSH REL reflects a need to protect workers from the significant risk of gastrointestinal damage and cancer.

HP OCTANE SUPREME:

TETRAETHYL LEAD:

■ for lead alkyls:

Exposure at or below the recommended TLV should provide protection against systemic poisoning due to excessive occupational exposure provided skin contact is avoided. It has been noted repeatedly that the ability of tetraethyl lead to penetrate intact skin in toxic amounts makes reliance on airborne concentrations impracticable in many situations.

For greater assurance, monitoring of urinary lead concentrations are recommended.

ETHYLENE DIBROMIDE:

HP OCTANE SUPREME:

■ For ethylene dibromide:

Odour Threshold: 25 ppm

The TLV is thought to be protective against eye and skin irritation and against liver and kidney damage.

HP OCTANE SUPREME:

TETRAETHYL LEAD:

■ The lead concentration in air is to be maintained so that the lead concentration in workers' blood remains below 0.060 mg/100 g of whole blood. The recommended TLV-TWA has been derived following a review of reports of adverse effects on reproduction, blood-pressure and other end-points of toxicity.

AROMATIC HYDROCARBON SOLVENT:

HP OCTANE SUPREME:

Odour threshold: 0.25 ppm.

The TLV-TWA is protective against ocular and upper respiratory tract irritation and is recommended for bulk handling of gasoline based on calculations of hydrocarbon content of gasoline vapour.

AROMATIC HYDROCARBON SOLVENT:

for xylenes:

IDLH Level: 900 ppm

Odour Threshold Value: 20 ppm (detection), 40 ppm (recognition)

NOTE: Detector tubes for o-xylene, measuring in excess of 10 ppm, are available commercially. (m-xylene and p-xylene give almost the same response).<</>

For cumene:

Odour Threshold Value: 0.008-0.132 ppm (detection), 0.047 ppm (recognition)

Exposure at or below the TLV-TWA is thought to prevent induction of narcosis.

CEL TWA: 50 ppm, 250 mg/m3 as total hydrocarbons [Manufacturer]

PERSONAL PROTECTION

RESPIRATOR

•Type A-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

EYE

Safety glasses with side shields.

- Chemical goggles.

- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent].

HANDS/FEET

- Wear chemical protective gloves, eg. PVC.

- Wear safety footwear or safety gumboots, eg. Rubber.

OTHER

- Overalls.
- PVC Apron.
- PVC protective suit may be required if exposure severe.
- Eyewash unit.

- Some plastic personal protective equipment (PPE) (e.g. gloves, aprons, overshoes) are not recommended as they may produce static electricity.

- For large scale or continuous use wear tight-weave non-static clothing (no metallic fasteners, cuffs or pockets), non sparking safety footwear.

ENGINEERING CONTROLS

• Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Flammable liquid; does not mix with water.

PHYSICAL PROPERTIES

Liquid. Does not mix with water. Toxic or noxious vapours/gas.

State	Liquid	Molecular Weight	Not Applicable
Melting Range (°C)	Not Available	Viscosity	Not Available
Boiling Range (°C)	Not Available	Solubility in water (g/L)	Immiscible
Flash Point (°C)	<60	pH (1% solution)	Not applicable
Decomposition Temp (°C)	Not Available	pH (as supplied)	Not Applicable
Autoignition Temp (°C)	Not Available	Vapour Pressure (kPa)	Not Available
Upper Explosive Limit (%)	Not Available	Specific Gravity (water=1)	Not Available
Lower Explosive Limit (%)	Not Available	Relative Vapour Density	Not Available
		(air=1)	
Volatile Component (%vol)	Not Available	Evaporation Rate	Not Available

Section 10 - STABILITY AND REACTIVITY

CONDITIONS CONTRIBUTING TO INSTABILITY

Presence of incompatible materials.

- Product is considered stable.

- Hazardous polymerisation will not occur.

For incompatible materials - refer to Section 7 - Handling and Storage.

Section 11 - TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED

Toxic effects may result from the accidental ingestion of the material; animal experiments indicate that ingestion of less than 40 gram may be fatal or may produce serious damage to the health of the individual. Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result. (ICSC13733).

EYE

There is evidence that material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation. Severe inflammation may be expected with pain. There may be damage to the cornea. Unless treatment is prompt and adequate there may be permanent loss of vision. Conjunctivitis can occur following repeated exposure. The liquid produces a high level of eye discomfort and is capable of causing pain and severe conjunctivitis. Corneal injury may develop, with possible permanent impairment of vision, if not promptly and adequately treated.

SKIN

Skin contact with the material may produce toxic effects; systemic effects may result following absorption. The material may cause moderate inflammation of the skin either following direct contact or after a delay of some time. Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering. Repeated exposure may cause skin cracking, flaking or drying following normal handling and use.

INHALED

Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may produce toxic effects.

The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage.

Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo.

Inhalation hazard is increased at higher temperatures.

Central nervous system (CNS) depression may include general discomfort, symptoms of giddiness, headache, dizziness, nausea, anaesthetic effects, slowed reaction time, slurred speech and may progress to unconsciousness. Serious poisonings may result in respiratory depression and may be fatal.

Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and inco-ordination.

CHRONIC HEALTH EFFECTS

■ Substance accumulation, in the human body, is likely and may cause some concern following repeated or long-term occupational exposure.

Ample evidence exists that developmental disorders are directly caused by human exposure to the material.

Ample evidence from experiments exists that there is a suspicionthis material directly reduces fertility.

There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment. Lead can cross the placenta, and cause miscarriage, stillbirths and birth defects. Exposure before birth can cause mental retardation, behavioural disorders and infant death. Lead can also cause reduced sex drive, impotence, sterility and damage the sperm of males, increasing the potential for birth defects. Periods in women can also be affected.

Chronic solvent inhalation exposures may result in nervous system impairment and liver and blood changes. [PATTYS].

TOXICITY AND IRRITATION

Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a nonallergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound.

For trimethylbenzenes:

Absorption of 1.2.4-trimethylbenzene occurs after oral, inhalation, or dermal exposure. Occupationally, inhalation and dermal exposures are the most important routes of absorption although systemic intoxication from dermal absorption is not likely to occur due to the dermal irritation caused by the chemical prompting quick removal. for petroleum:

This product contains benzene which is known to cause acute myeloid leukaemia and n-hexane which has been shown to metabolize to compounds which are neuropathic.

This product contains toluene.

This product contains ethyl benzene and naphthalene from which there is evidence of tumours in rodents

Carcinogenicity: Inhalation exposure to mice causes liver tumours, which are not considered relevant to humans.

The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

CARCINOGEN

Lead compounds, organic (NB: Organic lead compounds are metabolized at least in part, to ionic lead both in humans and animals. To the extent that ionic lead, generated from organic lead, is present in the body, it will be expected to exert the toxicities associated	International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs	Group	3
with inorganic lead.) Ethylene dibromide (NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data)	International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs	Group	2A
Ethylene dibromide — when used as a fumigant	Australia National Model Regulations for the Control of Scheduled Carcinogenic Substances	Schedule	2

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1, 2- Dichloroethane	International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs		Group	2B
REPROTOXIN				
ethylene dibromide	ILO Chemicals in the electron that have toxic effects on rep	5	Reduced fertility or sterility	HAs
ethylene dichloride	ILO Chemicals in the electron	ILO Chemicals in the electronics industry that have toxic effects on reproduction		
SKIN				
tetraethyl lead	Australia Exposure Standards - Skin	Notes	Sk	
ethylene dibromide	Australia Exposure Standards - Skin	Notes	Sk	

Section 12 - ECOLOGICAL INFORMATION

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. This material and its container must be disposed of as hazardous waste. Avoid release to the environment.

Refer to special instructions/ safety data sheets.

Ecotoxicity Ingredient	Persistence:	Persistence: Air	Bioaccumulation	Mobility
ingrouon	Water/Soil		Dicaccamalation	mobility
aromatic hydrocarbon solvent	No Data	No Data		
	Available	Available		
tetraethyl lead	LOW	LOW	LOW	MED
ethylene dibromide	HIGH	HIGH	LOW	HIGH
ethylene dichloride	HIGH	HIGH	LOW	HIGH

Section 13 - DISPOSAL CONSIDERATIONS

Containers may still present a chemical hazard/ danger when empty.

- Return to supplier for reuse/ recycling if possible.

Otherwise:

- If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.

- Where possible retain label warnings and MSDS and observe all notices pertaining to the product.

- DO NOT allow wash water from cleaning or process equipment to enter drains.

- It may be necessary to collect all wash water for treatment before disposal.

- In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.

- Where in doubt contact the responsible authority.

- Recycle wherever possible.

- Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.

- Dispose of by: burial in a land-fill specifically licenced to accept chemical and / or pharmaceutical wastes or Incineration in

a licenced apparatus (after admixture with suitable combustible material).

- Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.

Section 14 - TRANSPORTATION INFORMATION



Labels Required: FLAMMABLE LIQUID

HAZCHEM: •3Y (ADG7)

ADG7: Class or Division: UN No.: Special Provision: Portable Tanks & Bulk Containers - Instruction: Packagings & IBCs - Packing Instruction: Name and Description: FLAMM hydrocarbon solvent)	3 1993 223 274 T4 None ABLE LIQUID, N.O.S. (contains a	Subsidiary Risk: Packing Group: Limited Quantity: Portable Tanks & Bulk Containers - Special Provision: Packagings & IBCs - Special Packing Provision: iromatic	None III 5 L TP1 TP29 P001 IBC03 LP01		
Land Transport UNDG: Class or division: UN No.: Shipping Name:FLAMMABLE L solvent)	3 1993 IQUID, N.O.S. (contains aromatic	Subsidiary risk: UN packing group: hydrocarbon	None III		
Air Transport IATA: ICAO/IATA Class: UN/ID Number: Special provisions:	3 1993 A3	ICAO/IATA Subrisk: Packing Group:	None III		
Shipping name:FLAMMABLE LIQUID, N.O.S.(contains aromatic hydrocarbon solvent)					
Maritime Transport IMDG: IMDG Class: UN Number: EMS Number: Limited Quantities: Shipping name:FLAMMABLE L	3 1993 F- E, S- E 5 L IQUID, N.O.S.(contains aromatic	IMDG Subrisk: Packing Group: Special provisions: Marine Pollutant: hydrocarbon solvent)	None III 223 274 955 Yes		

Section 15 - REGULATORY INFORMATION

POISONS SCHEDULE S6

REGULATIONS

HP Octane Supreme (CAS:) is found on the following regulatory lists;

Australia Exposure Standards", "Australia Hazardous Substances", "Australia High Volume Industrial Chemical List (HVICL)", "Australia Inventory of Chemical Substances (AICS)", "Australia National Pollutant Inventory", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix E (Part 2)", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix I", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "IMO IBC Code Chapter 17: Summary of minimum requirements", "IMO Provisional Categorization of Liquid Substances - List 2: Pollutant only mixtures containing at least 99% by weight of components already assessed by IMO", "IMO Provisional Categorization of Liquid Substances - List 3: (Trade-named) mixtures containing at least 99% by weight of components already assessed by IMO, presenting safety hazards", "International Agency for Research on Cancer (IARC) -Agents Reviewed by the IARC Monographs", "International Fragrance Association (IFRA) Survey: Transparency List", "International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index", "OECD List of High Production Volume (HPV) Chemicals", "OSPAR National List of Candidates for Substitution – Norway", "United Nations Consolidated List of Products Whose Consumption and/or Sale Have Been Banned, Withdrawn, Severely Restricted or Not Approved by Governments"

Regulations for ingredients

aromatic hydrocarbon solvent (CAS: 64742-95-6) is found on the following regulatory lists;

"Australia - Australian Capital Territory - Environment Protection Regulation: Ambient environmental standards (Domestic water supply - organic compounds)","Australia - Australian Capital Territory - Environment Protection Regulation: Pollutants entering waterways taken to cause environmental harm (Domestic water supply quality)","Australia Exposure Standards","Australia Hazardous Substances", "Australia High Volume Industrial Chemical List (HVICL)","Australia Inventory of Chemical Substances (AICS)", "Australia National Pollutant Inventory","Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix E (Part 2)","Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix F (Part 3)", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix F (Part 3)", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6", "GESAMP/ENS Composite List - GESAMP Hazard Profiles","IMO IBC Code Chapter 17: Summary of minimum requirements","IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk","IMO Provisional Categorization of Liquid Substances - List 2: Pollutant only mixtures containing at least 99% by weight of components already assessed by IMO", "IMO Provisional Categorization of Liquid Substances - List 3: (Trade-named) mixtures containing at least 99% by weight of Components already assessed by IMO, presenting safety hazards","International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs","International Council of Chemical Associations (ICCA) - High Production Volume List", "International Fragrance Association (IFRA) Survey: Transparency List", "International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index", "OECD List of High Production Volume (HPV) Chemicals,"OSPAR List of Chemicals for Piority Action", "OSPAR National List of Candidates for Substitution – Norway", "WHO Guidelines for Dinking-water Quality - Guideli

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tetraethyl lead (CAS: 78-00-2) is found on the following regulatory lists;

"Australia - Victoria Occupational Health and Safety Regulations - Schedule 9: Materials at Major Hazard Facilities (And Their Threshold Quantity) Table 2", "Australia Exposure Standards", "Australia Hazardous Substances", "Australia Inventory of Chemical Substances (AICS)", "Australia National Pollutant Inventory", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix C", "Australia Standard of the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix C, "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix C, "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix G, "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Scheduling of Medicines and Poisons (SUSMP) - Appendix I", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "IMO IBC Code Chapter 17: Summary of minimum requirements", "International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs", "International Chemical Secretariat (ChemSec) SIN List (*Substitute It Now!)", "International Council of Chemical Associations (ICCA) - High Production Volume List", "OECD List of High Production Volume (HPV) Chemicals", "OSPAR List of Substances of Possible Concern", "United Nations Consolidated List of Products Whose Consumption and/or Sale Have Been Banned, Withdrawn, Severely Restricted or Not Approved by Governments", "United Nations List of Prior Informed Consent Chemicals"

ethylene dibromide (CAS: 106-93-4) is found on the following regulatory lists;

"Australia - Australian Capital Territory - Environment Protection Regulation: Ambient environmental standards (Domestic water supply - pesticides)", "Australia - Australian Capital Territory - Environment Protection Regulation: Pollutants entering waterways taken to cause environmental harm (Domestic water supply quality)", "Australia - New South Wales Notifiable Carcinogens", "Australia - Queensland Hazardous Materials and Prescribed Quantities for Major Hazard Facilities", "Australia - Western Australia Carcinogenic substances to be used only for purposes approved by the Commissioner", "Australia Australian Pesticides and Veterinary Medicines Authority (APVM) Restricted Chemical Products", "Australia Chemicals Subject to the Stockholm and Rotterdam Conventions", "Australia Customs (Prohibited Exports) Regulations 1958 - Schedule 2: Goods, being certain chemicals, the exportation of which is prohibited unless permission is granted under regulation 4A", "Australia Exposure Standards", "Australia Hazardous Substances", "Australia Inventory of Chemical Substances (AICS)", "Australia National Model Regulations for the Control of Scheduled Carcinogenic Substances", "Australia Inventory of Chemical Groups", "Australia Occupational Health and Safety (Commonwealth Employment) (National Standards) Regulations 1994 - Scheduled Carcinogenic Substance", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 7, "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk", "International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs", "International Chemical Secretariat (ChemSec) SIN List ("Substitute It Now!)", "International Council of Chemical Associations (ICCA) - High Production Volume List", "OECD List of High Production Volume (HPV) Chemicals", "United Nations Consolidated List of Products Whose Consumption and/or Sale Have Been Banned, Withdrawn, Severely Restricted or Not

ethylene dichloride (CAS: 107-06-2) is found on the following regulatory lists;

Australia - Australian Capital Territory - Environment Protection Regulation: Ambient environmental standards (Domestic water supply - inorganic chemicals)", "Australia - Australian Capital Territory - Environment Protection Regulation: Ambient environmental standards (Domestic water supply - organic compounds)", "Australia - Australian Capital Territory - Environment Protection Regulation: Ambient environmental standards (STOCK - inorganic chemicals)", "Australia - Australian Capital Territory -Environment Protection Regulation: Pollutants entering waterways taken to cause environmental harm (Domestic water supply quality)", "Australia - Australian Capital Territory - Environment Protection Regulation: Pollutants entering waterways taken to cause environmental harm (IRRIG)", "Australia - Australian Capital Territory - Environment Protection Regulation: Pollutants entering waterways taken to cause environmental harm (STOCK)", "Australia Chemicals Subject to the Stockholm and Rotterdam Conventions", "Australia Customs (Prohibited Exports) Regulations 1958 - Schedule 2: Goods, being certain chemicals, the exportation of which is prohibited unless permission is granted under regulation 4A", "Australia Netional Pollutant Inventory", "Australia Hazardous Substances", "Australia Inventory of Chemical Substances (AICS)", "Australia National Pollutant Inventory", "Australia New Zealand Food Standards Code - Maximum Residue Limits (Australia only) - Schedule 1", "Australia New Zealand Food Standards Code -Maximum Residue Limits (Australia only) - Schedule 3 - Chemical Groups," "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix E (Part 2)", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "IMO IBC Code Chapter 17: Summary of minimum requirements", "IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk", "IMO Provisional Categorization of Liquid Substances

Section 16 - OTHER INFORMATION

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references. A list of reference resources used to assist the committee may be found at: www.chemwatch.net/references.

• The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings.

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This is the end of the MSDS.