Infosafe No™	1CHFO	Issue Date : July 2014	RE-ISSUED by CHEMSUPP

Product Name : **PETROLEUM CRUDE OIL**

Classified as hazardous

1. Identification

GHS Product Identifier: PETROLEUM CRUDE OIL

Company Name: CHEM-SUPPLY PTY LTD (ABN 19 008 264 211)

Address: 38 - 50 Bedford Street GILLMAN
SA 5013 Australia

Telephone/Fax Number: Tel: (08) 8440-2000
Fax: (08) 8440-2001

Recommended use of the chemical and restrictions on use: Production of various hydrocarbon gases (ethane, propane, butane), naphtha of several grades, gasoline, kerosene, fuel oils, gas oil, lubricating oils, paraffin wax and ashphalt by cracking and distillation. From the hydrocarbon gases, ethylene, propylene and butylene are produced, from which alcohols, ethylene glycols, monomers for a wide range of plastics, elastomers and pharmaceuticals are produced. Production of benzene, toluene, phenol, xylene and biosynthetically produced proteins.

Other Names

Name	Product Code
PETROLEUM CRUDE (Crude Oil) TG	PT088

Other Information: EMERGENCY CONTACT NUMBER: +61 08 8440 2000
Business hours: 8:30am to 5:00pm, Monday to Friday.

Chem-Supply Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon Chem-Supply Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of Chem-Supply Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

2. Hazard Identification

GHS classification of the substance/mixture: Carcinogenicity: Category 2

Signal Word (s): DANGER

Hazard Statement (s): H350 May cause cancer.

Pictogram (s): Health hazard

Precautionary statement – Prevention: P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P281 Use personal protective equipment as required.

Precautionary statement – Response: P308+P313 IF exposed or concerned: Get medical advice/attention.

Precautionary statement – Storage: P405 Store locked up.

3. Composition/information on ingredients

Chemical Characterization: Liquid

Information on Composition: A highly complex mixture of paraffinic, cycloparaffinic (naphthenic) and aromatic hydrocarbons, containing a low percentage of sulfur and trace amounts of nitrogen and oxygen compounds.

Ingredients

Name	CAS	Proportion	Hazard Symbol	Risk Phrase
Petroleum	8002-05-9	100 %	T	R45(1)

Infosafe No™	1CHFO	Issue Date : July 2014	RE-ISSUED by CHEMSUPP

Product Name : **PETROLEUM CRUDE OIL**

Classified as hazardous

Ingredients	Name	CAS	Proportion	Hazard Symbol	Risk Phrase
	Propane/Butane Propellant	Mixture	2-11 %		
	Hexane	64742-89-8	2-8 %		
	n-Pentane	109-66-0	1-6 %	Xn, F+, N	R12, R65, R66, R67, R51/53
	n-Octane	111-65-9	1-5 %	Xn, Xi, F, N	R11, R38, R65, R67, R50/53
	n-Heptane	142-82-5	1-5 %	Xn, Xi, F, N	R11, R38, R67, R65, R50/53
	n-Hexane	110-54-3	1-5 %	Xn, Xi, F, N	R11, R38, R48/20, R62, R65, R52, R51
	Benzene	71-43-2	0.1-5 %		
	Cyclohexane	110-82-7	0.5-4 %	Xn, Xi, F, N	R11, R38, R65, R67, R50/53
	Nonane	111-84-2	1-4 %		
	Methylcyclohexane	108-87-2	1-4 %	Xn, Xi, F, N	R11, R38, R65, R67, R51/53
	Sulfur	7704-34-9	0.1-3 %	Xi, F	R36/38, R11
	Xylene	1330-20-7	1-3 %	Xn, Xi	R10, R20/21, R38
	Ethyl benzene	100-41-4	1-3 %	Xn, F	R11, R20
	Hydrogen sulphide	7783-06-4	0.1-3 %	T+	R26
	Toluene	108-88-3	1-2 %	Xn, F	R11, R20

4. First-aid measures

Inhalation If inhaled, remove from contaminated area to fresh air immediately. Apply artificial respiration if not breathing. If breathing is difficult, give oxygen. Immediately obtain medical aid if cough or other symptoms appear.

Ingestion Give water to drink. DO NOT induce vomiting. Seek medical attention.

Skin Wash with plenty of soap and water. If irritation occurs seek medical advice.

Eye contact Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. In all cases of eye contamination it is a sensible precaution to seek medical advice.

First Aid Facilities Maintain eyewash fountain and drench facilities in work area.

Advice to Doctor Consult Poisons Information Centre.

Other Information For advice, contact the National Poisons Information Centre (Phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.

5. Fire-fighting measures

Specific Methods Caution: Use of water spray when fighting fire may be inefficient.
Small fire: Use foam, dry chemical, CO2 or water spray.
Large fire: Use foam, fog or water spray - Do NOT use water jets.
If safe to do so, move undamaged containers from the fire area. Cool containers with flooding quantities of water until well after the fire is out. Avoid getting water inside the containers.

Specific hazards arising from the chemical HIGHLY FLAMMABLE: These products have a low flash point. Will be easily ignited by heat, sparks or flames. Vapours will form explosive mixtures with air. Vapours will travel to source of ignition and flash back. Most vapours are heavier than air and will collect in low or confined areas (drains, basements, tanks). Many liquids are lighter than water. Containers may explode when heated. Fire will produce irritating, poisonous and/or corrosive gases. Vapours from run-off may create an explosion hazard.

Hazchem Code 3WE

Precautions in connection with Fire SCBA and structural firefighter's uniform may provide limited protection. Fully encapsulating, gas-tight suits should be worn for maximum protection.

6. Accidental release measures

Spills & Disposal Eliminate all ignition sources (no smoking, flares, sparks or flame) within at least 50m. All equipment in handling this product must be earthed. Do NOT touch or walk through this product. Stop leak if safe to do so. Prevent entry into waterways, drains, confined areas.
Vapour suppressing foam may be used to control vapours. Water spray may be used to knock down or divert vapours.

	Absorb spill with earth, sand or other non-combustible material. Use clean, non-sparking tools to collect material and place it in loosely-covered metal or plastic containers for later disposal. SEEK EXPERT ADVICE ON HANDLING AND DISPOSAL.
Personal Precautions	Avoid inhalation, contact with skin, eyes and clothing. Evacuate the area of all non-essential personnel.
Personal Protection	Wear protective clothing specified for normal operations (see Section 8)
Clean-up Methods - Small Spillages	Absorb or contain liquid with sand, earth or spill control material. Shovel up using non sparking tools and place in a labelled, sealable container for subsequent safe disposal. Put leaking containers in a labelled drum or overdrum.
Clean-up Methods - Large Spillages	Seek expert advice on handling and disposal.

7. Handling and storage

Conditions for safe storage, including any incompatabilities	Store in well ventilated area. Store away from sources of heat or ignition. Store away from combustible materials. Store away from oxidizing agents. Keep containers closed at all times.
Storage Regulations	Refer Australian Standard AS 1940-2004 'The storage and handling of flammable and combustible liquids'.

8. Exposure controls/personal protection

Occupational exposure limit values

Name	STEL		TWA		
	mg/m3	ppm	mg/m3	ppm	Footnote
n-Pentane	2210	750	1770	600	
n-Octane	1750	375	1400	300	
n-Heptane	2050	500	1640	400	
n-Hexane			72	20	
Benzene			3.2	1	
Cyclohexane	1050	300	350	100	
Nonane			1050	200	
Methylcyclohexane			1610	400	
Xylene	655	150	350	80	Xylene (o-, m-, p- isomers)
Ethyl benzene	543	125	434	100	
Hydrogen sulphide	21	15	14	10	
Toluene	574	150	191	50	

Other Exposure Information

A time weighted average (TWA) has been established for n-Pentane (Safe Work Australia) of 1770 mg/m³, (600 ppm). The corresponding STEL level is 2210 mg/m³,(750 ppm). A TWA has been established for n-Hexane (Safe Work Australia) of 72 mg/m³, (20 ppm). A TWA has been established for Benzene (Safe Work Australia) of 3.2 mg/m³, (1 ppm). A TWA has been established for n-Heptane (Safe Work Australia) of 1640 mg/m³, (400 ppm). The corresponding STEL level is 2050 mg/m³, (500 ppm). A TWA has been established for n-Octane (Safe Work Australia) of 1400 mg/m³, (300 ppm). The corresponding STEL level is 1750 mg/m³, (375 ppm). A TWA has been established for Nonane (Safe Work Australia) of 1050 mg/m³, (200 ppm). A TWA has been established for Cyclohexane (Safe Work Australia) of 1050 mg/m³, (300 ppm). The corresponding STEL level is 350 mg/m³, (100 ppm). A TWA has been established for Methylcyclohexane (Safe Work Australia) of 1610 mg/m³, (400 ppm). A TWA has been established for Ethyl benzene (Safe Work Australia) of 434 mg/m³, (100 ppm). The corresponding STEL level is 543 mg/m³, (125 ppm). A TWA has been established for Xylene (Safe Work Australia) of 350 mg/m³, (80 ppm). The corresponding STEL level is 655 mg/m³, (150 ppm). A TWA has been established for Hydrogen sulphide (Safe Work Australia) of 14 mg/m³, (10 ppm). The corresponding STEL level is 21 mg/m³, (15 ppm). A TWA has been established for Toluene (Safe Work Australia) of 191 mg/m³, (50 ppm). The corresponding STEL level is 574 mg/m³, (150 ppm). The STEL (Short Term Exposure Limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week.

Appropriate engineering controls	Provide sufficient ventilation to ensure that the working environment is below the TWA (time weighted average). Where vapours or mists are generated, particularly in enclosed areas, and natural ventilation is inadequate, a flame proof exhaust ventilation system is required. Refer to AS 1940-The storage and handling of flammable and combustible liquids and AS 2430-Explosive gas atmospheres for further information concerning ventilation requirements.
Respiratory Protection	Where ventilation is not adequate, respiratory protection may be required. Avoid breathing vapours or mists. Select and use respirators in accordance with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. When mists or vapours exceed the exposure standards then the use of the following is recommended: Approved respirator with organic vapour and dust/mist filters. Filter capacity and respirator type depends on exposure levels.
Eye Protection	The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.
Hand Protection	Hand protection should comply with AS 2161, Occupational protective gloves - Selection, use and maintenance.
Personal Protective Equipment	Final choice of personal protective equipment will depend on individual circumstances and/or according to risk assessments undertaken.
Footwear	Safety boots in industrial situations is advisory, foot protection should comply with AS 2210, Occupational protective footwear - Guide to selection, care and use.
Body Protection	Clean clothing or protective clothing should be worn, preferably with an apron. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.
Hygiene Measures	Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

9. Physical and chemical properties

Form	Liquid
Appearance	Viscous dark-brown to black liquid.
Odour	Unpleasant, sulfurous odour.
Boiling Point	65 - 100 °C
Solubility in Water	Insoluble.
Solubility in Organic Solvents	Soluble in benzene, chloroform and ether. Very slightly soluble in alcohol.
Specific Gravity	0.62 - 0.76
Volatile Component	40 - 60 %
Density	0.8 - 1 g/cm³
Flash Point	-40 to 60°C
Flammability	Flammable liquid.
Auto-Ignition Temperature	260 °C
Flammable Limits - Lower	0.4 Vol%
Flammable Limits - Upper	8 Vol%
Other Information	Refractive index: 1.388

10. Stability and reactivity

Chemical Stability	Stable.
Incompatible Materials	Strong oxidizing agents, (eg. peroxides, dichromates, permanganates, chlorates, nitrates, chlorine), strong acids, strong alkalis and halogens.
Hazardous Decomposition Products	Oxides of carbon and sulfur, hydrogen sulfide, aldehydes, aromatic, other hydrocarbons.
Hazardous Polymerization	Will not occur.

11. Toxicological Information

Classified as hazardous

Ingestion	May be toxic by ingestion. Aspiration (inadvertent suction) of liquid of the light hydrocarbon fraction into the lung can produce chemical pneumonitis, pulmonary edema/hemorrhage and even death.
Inhalation	May be toxic by inhalation. Vapours may cause drowsiness and dizziness.
Skin	May be harmful in contact with skin. Local skin irritant.
Eye	May irritate or burn skin and eyes.
Carcinogenicity	Components of the mixture are classified. Carcinogen Category 2, Toxic - May cause cancer - Safe Work Australia Listed as a carcinogen, category 2 in List of Designated Hazardous Substances, - Safe Work Australia Probable human carcinogens are those substances for which there is sufficient evidence to provide a strong presumption that human exposure might result in the development of cancer. This evidence is generally based on appropriate long term animal studies, limited epidemiological evidence or other relevant information.
Chronic Effects	Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed. Repeated exposure may cause skin drying and cracking.

12. Ecological information

Known Harmful Effects on the Environment	Very toxic to aquatic organisms. May cause long term adverse effects in the aquatic environment.
Environmental Protection	The material and its container must be disposed of as hazardous waste.

13. Disposal considerations

Disposal Considerations	Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and disposed of according to relevant local, state and federal government regulations.

14. Transport information

Transport Information	Dangerous goods of Class 3 (Flammable Liquid) are incompatible in a placard load with any of the following: Class 1, Class 2.1, if both the Class 3 and Class 2.1 dangerous goods are in bulk, Class 2.3, Class 4.2, Class 5, Class 6, if the Class 3 dangerous goods are nitromethane, Class 7.
U.N. Number	1267
UN proper shipping name	PETROLEUM CRUDE OIL
Transport hazard class(es)	3
Hazchem Code	3WE
Packaging Method	3.8.3
Packing Group	II
EPG Number	3A1
IERG Number	14

15. Regulatory information

Poisons Schedule	S5

16. Other Information

Date of preparation or last revision of SDS	July 2009
Literature References	'Standard for the Uniform Scheduling of Medicines and Poisons No. 4', Commonwealth of Australia, June 2013. Lewis, Richard J. Sr. 'Hawley's Condensed Chemical Dictionary 13th. Ed.', Rev., John Wiley and Sons, Inc., NY, 1997. National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.', 2007. 'Labelling of Hazardous Workplace Chemicals, Code of Proctice' Safe Work Australia. Standards Australia 'AS 1940-2004 The Storage and Handling of Flammable and Combustible Liquids. Standards Australia, 'SAA/SNZ HB 76:2010 Dangerous Goods - Initial Emergency Response Guide',

Standards Australia/Standards New Zealand, 2010.
Worksafe Australia, 'Approved Criteria for Classifying Hazardous Substances [NOHSC:1008(2004)]'.
Worksafe Australia, 'Hazardous Substances Information System, 2005'.
Worksafe Australia, 'National Code of Practice for the Labelling of Workplace Hazardous Substances (2011)'.
Worksafe Australia, 'National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)]'.

Contact Person/Point

Paul McCarthy Ph. (08) 8440 2000 DISCLAIMER STATEMENT:
All information provided in this data sheet or by our technical representatives is compiled from the best knowledge available to us. However, since data, safety standards and government regulations are subject to change and the conditions of handling and use, or misuse, are beyond our control, we make no warranty either expressed or implied, with respect to the completeness or accuracy to the information contained herein. Chem-Supply accepts no responsibility whatsoever for its accuracy or for any results that may be obtained by customers from using the data and disclaims all liability for reliance on information provided in this data sheet or by our technical representatives.
...End Of MSDS...