SAFETY DATA SHEET

Date of Issue: 10 March, 2014
Issue Number: 1

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Solvent 150

Other names: C10,Pegasol R150,Shellsol AB

USE: Solvent for use only in industrial manufacturing processes.

COMPANY:
Pacific Sphere Limited
P.O. Box 129
Waiuku 2341
tel (09) 296 8965 or (09) 237 1013
fax (09) 296 8969 or (09) 237 1016

Emergency Telephone Numbers:
NATIONAL POISON CENTRE 0800 764 766
POLICE, FIRE, AMBULANCE 111

2. HAZARDOUS IDENTIFICATIONS:

EMERGENCY OVERVIEW

EPA New Zealand Approval Code: HSR 002656 (Combustible,toxic (6.7) Group Standard 2006

HSNO Hazard Classification: 3.1D,6.1E, 6.3B, 6.4A, 6.7B, 6.8B, 6.9B, 9.1B

Refer to www.epa.govt.nz for Controls for this substance.

Signal word: DANGER

Hazard Statements

H302 Harmful if swallowed.
H304 May be fatal is swallowed and enters airways.
H312 Harmful in contact with skin.

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H333 May be harmful if inhaled.
H351 Suspected of causing cancer.
H361 Suspected of damaging fertility or the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.
H402 Harmful to aquatic life.
H433 Harmful to terrestrial vertebrates.

Prevention Statements

P102 Keep out of reach of children.
P103 Read label before use.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P260 Do not breathe vapours.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P280 Wear protective gloves and protective eye/face protection
P281 Use personal protective equipment as required.

Response Statements

P101 If medical advice is needed, have product container or label at hand.
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTRE or doctor.
P330 Rinse mouth.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P312 Call a POISON CENTRE or a doctor if you feel unwell.
P362 Take off contaminated clothing and wash before re-use.

P303 + P361 + P353 IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water.

P304 + P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P312 Call a POISON CENTRE or a doctor if you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical advice.

P308 + P313 If exposed or concerned: Get medical advice.
P314 Get medical advice if you feel unwell.

P370 + P378 In case of fire: Use water fog or mist or alcohol-resistant foam.

Storage Statement
P403 + P235 Store in well-ventilated place. Keep cool.
P405 Store locked up.

Disposal Statement
P501 Dispose of product to a landfill in accordance with any local regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Common name	CAS. No	% w/w
Aromatic Hydrocarbon,c9-c11	64742-94-5	40-50 %
1,2,3,5 tetramethylbenzene	527-53-7	20-30 %
1.2,4,5 tetramethylbenzene	95-93-2	10-20 %
Naphthalene	91-20-3	5-10 %

4. FIRST AID MEASURES

Consult the National Poisons Centre, telephone 0800 764 766 [0800 POISON] or a doctor in every case of suspected poisoning. If medical advice is needed, have product container or label at hand.

INGESTION: Rinse mouth with water. Do NOT induce vomiting. Get immediate medical assistance. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.
INHALATION: Move person to fresh air and keep warm and at rest. Get immediate medical assistance. Do NOT delay. If breathing is difficult, give oxygen.
SKIN: Remove immediately all contaminated clothing and footwear. Wash affected area with plenty of water followed by soap and water. Get medical advice if redness, swelling or blisters occur. Wash contaminated clothing/footwear before re-use.
EYES: Hold eyes open and rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do after the first 5 minutes. Continue rinsing for at least 15 minutes. Get medical attention if irritation persists.

NOTES TO PHYSICIAN: Treat symptomatically. Risk of aspiration into lungs resulting in chemical pneumonitis which may be fatal. Consider gastric gavage with protected airway and administration of activated charcoal. Potential for cardiac sensitization particular in abuse situations. Hypoxia or negative inotropes may enhance these effects; consider oxygen therapy.

5. FIRE FIGHTING MEASURES

FLASH POINT: 60-64 ^{0}C
Flammable Limits LFL : 0.6% UFL : 7.0 %

EXTINGUISHING MEDIA: Use water fog or mist or alcohol-resistant foam. Use dry chemical powder, carbon dioxide, sand or earth for small fires only. Do NOT use water in a jet.

FIRE & EXPLOSION HAZARDS: The vapour is heavier than air and can spread across ground and distant ignition is possible. Above flash point, vapour-air mixtures are explosive within

the flammable limits given above. Avoid breathing smoke. Prevent extinguishing water from getting into the aquatic environment.
SPECIFIC HAZARDS: Cool fire exposed containers with large quantities of water.

FIRE-FIGHTING EQUIPMENT: Wear self-contained breathing apparatus and personal protection clothing.

6. ACCIDENTAL RELEASE MEASURES

SPILLS: Flammable liquid. Vapor forms explosive mixture with air. Isolate hazard area and keep unnecessary and unprotected people away from area. Stay upwind and keep out of low lying areas.
Wear personal protective equipment. Avoid contact with skin and eyes.
Shut off leak if safe to do so. Remove or isolate ignition sources. Contain spill. Avoid run off into drains or sewers. Do not contaminate watercourses or the ground. Take precautions against static discharge. Bound or ground (earth) all equipment. Ventilate contaminated area. The vapour is heavier than air and can spread across ground and accumulate in low-lying areas; distant ignition is possible.
For large spills (more than a drum), recover liquid and transfer by mechanical means to labeled salvage tank that can be sealed for recovery or disposal of product. Allow residues to evaporate. Water can be used to disperse vapors and to clean spill area although prevent water from entering sewers or drains. Remove any contaminated soil and dispose of safely by waste management company.
For small spills, absorb with an appropriate material, e.g. vermiculite, and dispose of waste safely in a labelled sealed container for recovery or disposal.
If contamination of drains, sewers or waterways occurs immediately notify Emergency Services (111).

DISPOSAL: Dispose of contaminated waste or product to an approved landfill in accordance with local regulations.

7. HANDLING AND STORAGE

HANDLING: Read label before use. Use only in well-ventilated areas. Avoid breathing vapors or direct contact with product. Wear personal protective equipment.
Remove ignition sources. Avoid sparks. Electrostatic charge may be generated during pumping with risk of fire. Restrict line viscosity to avoid generation of electrostatic discharge. Take precautions to use bonded or grounded (earthed) equipment. No Smoking. Do not use compressed air for filling, discharging or handling.
Use only in well- ventilated area. Keep container closed when not in use. Wear personal protective equipment to prevent breathing of and contact with product. Wear gloves and protect eyes from splashes. Wash hands and exposed skin after handling.

STORAGE: Ensure all storage areas have adequate fire-fighting equipment**.** Store in closed original container in a secure cool dry well-ventilated place, away from sunlight, ignition sources, heat, incompatible substances, aerosols, other flammables, oxidizing agents, and corrosives, out of reach of children, and away from food, drink and animal foodstuffs.
Take precautions to avoid accumulation of vapours in pits and confined spaces.
For containers or container linings, use mild steel or stainless steel.

Avoid contact with natural, butyl, neoprene or nitrile rubbers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE GUIDELINES: NZ Workplace Exposure Standard (WES) have been set for this substance.

	WES-TWA	WES-STEL
Naphthalene	10 ppm (52 mg/m^3)	15 ppm (79mg/ m^3)

ENGINEERING CONTROLS: Use only in a well-ventilated area. A half-face filter mask suitable for organic gases and vapors (boiling point > 65 ^{0}C) is recommended for low concentration level exposures. Otherwise a full-piece organic vapour respiratory protective equipment is required. Where air-filtering respirators are unsuitable (e.g. air-borne concentrations are high, risk or oxygen deficiency, confined space) use positive pressure breathing apparatus.

PERSONAL PROTECTIVE EQUIPMENT (PPE): Wear impervious protective clothing including safety shoes or boots. Wear appropriate chemical resistant gloves, e.g. Viton. For incidental/splash contact, nitrile rubbers gloves are suitable. Avoid contact with eyes. Wear chemical goggles if splash or aerosol/mist exposure risk. Refer to the relevant AS/NZ standards for appropriate personal protective equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Colour:	Clear, colourless
Odour:	Aromatic
Odour threshold:	0.27 ppm
Boiling point (^{0}C):	174 – 215 (typical)
Flash point (^{0}C):	63> (typical)
Flammability limits in air (%v/v):	1.0 to 7.1
Vapour pressure (kPa at 20^{0}C):	0.370
Density at 15^{0}C, g/cc:	0.79
Solubility in water:	Imiscible
pH:	Not applicable

10. STABILITY AND REACTIVITY

STABILITY (CONDITIONS TO AVOID): Stable under normal storage and use conditions. Avoid heat, sparks, open flames and other ignition sources. Reacts violently with strong oxidizing agents. Prevent vapour accumulation.
INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizing agents.
HAZARDOUS DECOMPOSITION PRODUCTS: Dependent on conditions under which decomposition occurs; gases will be complex mixture and include carbon monoxide and carbon dioxide.
HAZARDOUS POLYMERIZATION: Not known to occur.

11. TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS: This section includes possible adverse effects, which might occur if this product is not handled in the recommended manner.

INGESTION: Harmful if swallowed. Symptoms of exposure arise from central nervous system depressions, e.g. fatigue, confusion, headache, dizziness and drowsiness. Aspiration into the lungs can cause chemical pneumonitis which can be fatal.

INHALATION: May be harmful if inhaled. May cause irritation of upper respiratory tract. Symptoms of overexposure include central nervous system depression including headache, dizziness and nausea. If this material enters the lungs, symptoms may be coughing, choking, wheezing and difficulty in breathing. Note that the onset of respiratory symptoms may be delayed for several hours after exposure. Exposure to high concentration may cause unconsciousness and death.

SKIN CONTACT: Irritating to skin. Symptoms may include burning sensation, redness, swelling and /or blisters. Harmful by skin contact. May be absorbed through skin.

EYE CONTACT: Irritating to eyes. Symptoms can include redness, swelling, and/or blurred vision.

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS: If ingested or inhaled may cause adverse effects through prolonged or repeated exposure. Affects central nervous system with possible adverse effects such as impairing short term memory, balance and reaction time. Possible effects on auditory systems, i.e. hearing loss.
CANCER INFORMATION: Ethylbenzene which may be present in this product as a component at between 10 and 30% is identified as suspected of causing cancer.
TERATOLOGY (BIRTH DEFECTS) AND REPRODUCTIVE DEFECTS: Identified as suspected of damaging fertility or the unborn child.
MUTAGENICITY (EFFECTS ON GENETIC MATERIAL): Not a mutagen.

Toxicity data:
Oral, rat LD_{50} 490 mg/kg b.w.
Inhalation, LC_{50} (4hr) rat 18 mg/L

Additional information: Pre-existing medical conditions of central nervous system, skin and auditory system, may be aggravated by exposure to this product. Exposure to very high concentrations of similar materials have been associated with irregular heart rhythms and cardiac arrest.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE: This product has been classified as being ecotoxic; harmful in the aquatic environment and to terrestrial vertebrates.
MOVEMENT AND PARTITIONING: Product is miscible in water.
DEGRADATION AND PERSISTENCE: Not expected to bio accumulate significantly and is readily biodegradable. Product is mobile in soil and may contaminate groundwater. Avoid

contamination of drains and waterways. Oxidises by photo-chemical reactions in air.
ECOTOXICOLOGY: No EEL has been set for this substance.

Ecotoxicity data:

Xylene	*Oncrohynchus mykiss*	EC_{50} (96 hr)	3.3 mg/L
	Palaemonetes pugio	EC_{50} (48 hr)	8.5 mg/L
	Skeleonema costatum	EC_{50} (72 hr)	12.5 mg/L

13. DISPOSAL CONSIDERATIONS

Recover and recycle product whenever possible. Dispose of waste in accordance with Regional Authority or local council bylaws.
Ensure empty containers are vented and dry. Residues may cause an explosion hazard. Do not puncture, cut or weld uncleaned drums. Send clean dry drums to recycler or metal scrap reclaimer. Do not use empty drums for storing other products.

14. TRANSPORT REGULATIONS

This product is classified as a Dangerous Goods Class 3, packing group II.
Please consult the Land Transport Rule: Dangerous Goods 2005, and NZS 5433:2012 Transport of Dangerous Goods on Land for information.

TRANSPORT INFORMATION:

UN Number:	3098
PROPER SHIPPING NAME:	Petroleum Distallates, N.O.S
Class:	9
Sub risk:	-
Packing Group:	III
HAZCHEM:	3Z
Marine Pollutant:	No

15. REGULATORY INFORMATION

Classified as hazardous under the HSNO Act 1996 according to criteria of Minimum Degrees of Hazard (Threshold) Regulations, 2001.
EPA New Zealand Approval Code: HSR002656; Solvents (Combustible, Toxic [6.7]) Group Standard 2006
Refer to Section 2 for hazardous classifications and to **www.epa.govt.nz** for Controls and Conditions.

16. OTHER INFORMATION

ISSUE DATE:	10 March 2014
REPLACES:	Not applicable
REASONS FOR ISSUE:	NZ Format SDS

ABBREVIATIONS:

CAS No.	Chemical Abstracts Service Number
EPA	Environmental Risk Management Authority
HSNO	Hazardous Substances & New Organisms
STEL	Short Term Exposure Limit
TWA	Time Weighted Average
WES	Workplace Exposure Standard

REFERENCES:

Chemical Classification and Information database; www.epa.govt.nz
Supplier Safety Data Sheet

END of SAFETY DATA SHEET