Hi-Tec Oil Traders Pty Ltd ABN 28 053 837 362
5 Tarlington Place Smithfield NSW 2164
Correspondence: P.O Box 322 Castle Hill NSW 1765
Ph: 1300 796 009 | **Fax:** (02) 9604 1611 | **Email:** hitecoils@hi-tecoils.com.au
www.hi-tecoils.com.au

SAFETY DATA SHEET

Product name: **Hi-Tec X55**

1. COMPANY DETAILS AND PRODUCT IDENTIFICATION

COMPANY:	Hi-Tec Oil Traders Pty Ltd. (ABN 28 053 837 362)
ADDRESS:	PO Box 322 Castle Hill NSW 1765 5 Tarlington Place, Smithfield NSW 2164
TELEPHONE NUMBER:	1300 796 009
FAX NUMBER:	(02) 9604 1611
EMERGENCY TELEPHONE NUMBER:	1300 796 009
PRODUCT NAME:	Hi-Tec X55
OTHER NAMES:	Solvent X55
MANUFACTURER'S PRODUCT CODE:	
USE:	Industrial solvent
ADDITIONAL INFORMATION:	Refer to Product Information Sheet for additional information.
OTHER INFORMATION:	Visit our website: www.hi-tecoils.com.au Email: hitecoils@hi-tecoils.com.au

2. HAZARDS IDENTIFICATION

HAZARDOUS SUBSTANCE.
DANGEROUS GOODS.

Classified as hazardous according to the criteria of NOHSC, and as Dangerous Goods according to the Australian Dangerous Goods Code.

Symbol(s) : F Highly flammable.
Xn Harmful.
N Dangerous for the environment.

R-phrase(s) :
R11 Highly flammable.
R38 Irritating to skin.
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R62 Possible risk of impaired fertility.
R65 Harmful: may cause lung damage if swallowed.
R67 Vapours may cause drowsiness and dizziness.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrase(s) :
S9 Keep container in a well-ventilated place.
S16 Keep away from sources of ignition - No smoking.
S23 Do not breathe vapour. Adequate explosion-proof ventilation to control airborne concentrations.
S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.
S62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.
S24/25 Avoid contact with skin and eyes.

2. HAZARDS IDENTIFICATION (CONT.)

Health Hazards : Vapours may cause drowsiness and dizziness. Slightly irritating to respiratory system. Irritating to skin. Repeated exposure may cause skin dryness or cracking. Vapours may be irritating to the eye. Harmful: may cause lung damage if swallowed. Possibility of organ or organ system damage from prolonged exposure; see Chapter 11 for details. Target organ(s): Central nervous system (CNS). Peripheral nervous system. Harmful: danger of serious damage to health by prolonged exposure through inhalation. Causes serious nerve damage by prolonged exposure resulting in sensory loss. Possible risk of impaired fertility.

Signs and Symptoms : Defatting dermatitis signs and symptoms may include a burning sensation and/or a dried/cracked appearance. Skin irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blisters. Breathing of high vapour concentrations may cause central nervous system (CNS) depression resulting in dizziness, light-headedness, headache, nausea and loss of coordination. Continued inhalation may result in unconsciousness and death. Peripheral nerve damage may be evidenced by impairment of motor function
(incoordination, unsteady walk, or muscle weakness in the extremities, and/or loss of sensation in the arms and legs). If material enters lungs, signs and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest
congestion, shortness of breath, and/or fever. Eye irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blurred vision. Respiratory irritation signs and symptoms may include a temporary burning
sensation of the nose and throat, coughing, and/or difficulty breathing.

Safety Hazards : Highly flammable. In use, may form flammable/explosive vapour-air mixture. Electrostatic charges may be generated during pumping. Electrostatic discharge may cause fire.

Environmental Hazards : Expected to be toxic to aquatic organisms. May cause long term adverse effects in the aquatic environment.

SUSDP Schedule : 5

3. IDENTIFICATION / COMPOSITION OF INGREDIENTS

CHEMICAL CHARACTERISTICS: Liquid

Naphtha (petroleum), hydrotreated light	64742-89-8	100%

INGREDIENTS:-

Chemical Name	CAS	EINECS	Symbol(s)	R-phrase(s)	Conc. %w
n-Hexane	110-54-3	203-777-6	F, Xn, N	R11; R38; R48/20; R62; R65; R67; R51/53	10.00 - 30.00
Toluene	108-88-3	203-625-9	F, Xn	R11; R38; R48/20; R63; R65; R67	< 5.00 %

R-phrase(s)
R11 Highly flammable.
R38 Irritating to skin.
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R62 Possible risk of impaired fertility.
R63 Possible risk of harm to the unborn child.R65 Harmful: may cause lung damage if swallowed.
R67 Vapours may cause drowsiness and dizziness.

4. FIRST AID MEASURES

HEALTH EFFECTS

SWALLOWED:	If swallowed, do not induce vomiting: transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. If any of the following delayed signs and symptoms appear within the next 6 hours, transport to the nearest medical facility: fever greater than 101° F (37° C), shortness of breath, chest congestion or continued coughing or wheezing.
EYE:	Immediately irrigate with copious amounts 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.
SKIN:	Remove contaminated clothing and wash skin thoroughly with plenty of soap and water. High pressure injection through the skin requires **URGENT** medical attention for possible incision, irrigation and/or debridement.
INHALED:	Remove victim from exposure to fresh air – avoid becoming a casualty. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist. If breathing laboured and patient cyanotic (blue), ensure airways are clear and have qualified person give oxygen through face mask. If breathing has stopped apply artifical respiration at once. In the event of cardiac arrest, apply external cardiac massage and seek urgent medical aid.
FIRST AID FACILITIES:	Normal washroom facilities are generally suitable. Ensure an eye wash station and safety shower is available and ready for use.
ADVICE TO DOCTOR:	Potential for chemical pneumonitis. Consider: gastric lavage with protected airway, administration of activated charcoal. Call a doctor or poison control center for guidance. Potential for cardiac sensitisation, particularly in abuse situations. Hypoxia or negative inotropes may enhance these effects. Consider: oxygen therapy. Causes central nervous system depression. Dermatitis may result from prolonged or repeated exposure.
OTHER INFORMATION:	Keep water and mild soap near work site.

5. FIRE FIGHTING MEASURES

	Clear fire area of all non-emergency personnel.
Specific Hazards :	Carbon monoxide may be evolved if incomplete combustion occurs. Will float and can be reignited on surface water. The vapour is heavier than air, spreads along the ground and distant ignition is possible.
Extinguishing Media :	Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only. Do not discharge extinguishing waters into the aquatic environment.
Unsuitable Extinguishing Media :	Do not use water in a jet.
Protective Equipment for Firefighters :	Wear full protective clothing and self-contained breathing apparatus.
Additional Advice :	Keep adjacent containers cool by spraying with water.
Hazchem Code :	3[Y]E - For fire fighting, use foam (alcohol resistant foam may be required). Risk of explosion. Breathing apparatus, firefighting gear and chemically impervious protective gloves should be worn. Prevent spillage from entering drains or watercourses. Evacuation of people from the neighbourhood of an incident should be considered.

6. ACCIDENTAL RELEASE MEASURES

Observe all relevant local and international regulations.

Protective measures : Avoid contact with spilled or released material. Immediately remove all contaminated clothing. For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. For guidance on disposal of spilled material see Chapter 13 of this Material Safety Data Sheet. Shut off leaks, if possible without personal risks. Remove all possible sources of ignition in the surrounding area. Use appropriate containment (of product and fire fighting water) to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers. Attempt to disperse the vapour or to direct its flow to a safe location for example by using fog sprays. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding (earthing) all equipment.

Clean Up Methods : For small liquid spills (< 1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely. For large liquid spills (> 1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.

Additional Advice : See Chapter 13 for information on disposal. Notify authorities if any exposure to the general public or the environment occurs or is likely to occur. Vapour may form an explosive mixture with air.

7. HANDLING AND STORAGE

General Precautions : Avoid breathing vapours or contact with material. Only use in well ventilated areas. Wash thoroughly after handling. For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.

Handling : Avoid contact with skin, eyes, and clothing. Extinguish any naked flames. Do not smoke. Remove ignition sources. Avoid sparks. The vapour is heavier than air, spreads along the ground and distant ignition is possible. 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. Do NOT use compressed air for filling, discharging, or handling operations. Handle and open container with care in a well-ventilated area. Ventilate workplace in such a way that the Occupational Exposure Limit (OEL) is not exceeded. Do not empty into drains.

Storage : Must be stored in a diked (bunded) well-ventilated area, away from sunlight, ignition sources and other sources of heat. Bulk storage tanks should be diked (bunded). Keep away from aerosols, flammables, oxidizing agents, corrosives and from other flammable products which are not harmful or toxic to man or to the environment. Storage Temperature: Ambient.

Product Transfer : Electrostatic charges may be generated during pumping. Electrostatic discharge may cause 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. Do NOT use compressed air for filling, discharging, or handling operations. If positive displacement pumps are used, these must be fitted with a non-integral pressure relief valve.

7. HANDLING AND STORAGE (CONT.)

Recommended Materials : For containers, or container linings use mild steel, stainless steel. For container paints, use epoxy paint, zinc silicate paint.

Unsuitable Materials : Avoid prolonged contact with natural, butyl or nitrile rubbers.

Container Advice : Containers, even those that have been emptied, can contain explosive vapours. Do not cut, drill, grind, weld or perform similar operations on or near containers.

Additional Information : Ensure that all local regulations regarding handling and storage facilities are followed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limits

In the absence of occupational exposure standards for this product, it is recommended that the following are adopted.

Material	Source	Type	ppm	mg/m3	Notation
RCP - X55	HSPA OELs	TWA (8 h)		450 mg/m3	
n-Hexane	AU OEL	TWA	20 ppm	72 mg/m3	
Toluene	AU OEL	TWA	50 ppm	191 mg/m3	
	AU OEL	STEL	150 ppm	574 mg/m3	
	AU OEL	SKIN_DES	Can be absorbed through the skin		

Additional Information : Adequate ventilation to control airborne concentrations below the exposure guidelines/limits.

Biological Exposure Index (BEI) - See reference for full details

Material	Determinant	Sampling time	BEI	Reference
n-Hexane	2,5-Hexanedion in urine	End of shift at end of workweek	0.4 mg/l	ACGIH (2003)

Respiratory Protection : If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for organic gases and vapours [boiling point <65°C (149°F)] meeting EN371. Where air-filtering respirators are unsuitable (e.g., airborne concentrations are high, risk of oxygen deficiency, confined space) use appropriate positive pressure breathing apparatus.

Hand Protection : Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739, AS/NZS:2161) made from the following materials may provide suitable chemical protection:
Longer term protection: Nitrile rubber gloves Incidental contact/Splash protection: PVC or neoprene rubber gloves
Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended.

Eye Protection : Monogoggles (EN166)

Protective Clothing : Chemical resistant gloves/gauntlets, boots, and apron. Skin protection not ordinarily required beyond standard issue work clothes.

Monitoring Methods : Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate. Examples of sources of recommended air monitoring methods are given below or contact supplier.
Further national methods may be available. National Institute of Occupational Safety and Health (NIOSH), USA: Manual of Analytical Methods, http://www.cdc.gov/niosh/nmam/nmammenu.html.
Occupational Safety and Health Administration (OSHA), USA:

8. EXPOSURE CONTROLS / PERSONAL PROTECTION (CONT)

Monitoring Methods (cont.): Sampling and Analytical Methods, http://www.oshaslc.ov/dts/sltc/methods/toc.html. Health and Safety Executive (HSE), UK: Methods for the Determination of Hazardous Substances, http://www.hsl.gov.uk/search.htm.
Berufsgenossenschaftliches Institut für Arbeitssicherheit (BIA), Germany http://www.hvbg.de/d/bia/index.html. L'Institut National de Recherche et de Securité, (INRS), France http://www.inrs.fr/securite/hygiene_securite_travail.html.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance :	Colourless Liquid.
Odour :	Paraffinic Sweet
pH :	Not applicable.
Boiling point :	66 - 115 °C / 151 - 239 °F
Pour point :	< -50 °C / < -58 °F
Flash point :	Typical < -20 °C / < -4 °F(IP 170)
Explosion / Flammability limits in air:	1 - 7.5 %(V)
Auto-ignition temperature :	350 °C / 662 °F(ASTM E-659)
Vapour pressure :	15 kPa at 20 °C / 68 °F(estimated value(s))
Specific gravity :Density :	685 - 720 kg/m3 at 15 °C / 59 °F(ASTM D-4052)
Water solubility :	< 0.1 g/l
Solubility in other solvents :	Hydrocarbon solvent(s) Miscible.
n-octanol/water partition coefficient (log Pow):	ca. 4
Vapour density (air=1) :	3.1
Molecular weight :	90 g/mol

10. STABILITY AND REACTIVITY

Stability :	Stable under normal conditions of use.
Conditions to Avoid :	Avoid heat, sparks, open flames and other ignition sources.
Materials to Avoid :	Strong oxidising agents.
Hazardous Decomposition Products:	Thermal decomposition is highly dependent on conditions. A complex mixture of airborne solids, liquids and gases, including carbon monoxide, carbon dioxide and other organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation.

11. TOXICOLOGICAL INFORMATION

Basis for Assessment : Information given is based on product testing, and/or similar products, and/or components.

Acute Oral Toxicity : Expected to be of low toxicity: LD50 >2000 mg/kg , Rat Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.

Acute Dermal Toxicity : Expected to be of low toxicity: LD50 >2000 mg/kg , Rat

Acute Inhalation Toxicity : Expected to be of low toxicity: LC50 >20 mg/l / 4 hours, Rat High concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea; continued inhalation may result in unconsciousness and/or death.

Skin Irritation : Irritating to skin. Prolonged/repeated contact may cause defatting of the skin which can lead to dermatitis.

Eye Irritation : Expected to be non-irritating to eyes. Vapours may be irritating to the eye. Insufficient to classify.

Respiratory Irritation : Inhalation of vapours or mists may cause irritation to the respiratory system. Insufficient to classify.

Sensitisation : Not expected to be a skin sensitiser.

Repeated Dose Toxicity : Central nervous system: repeated exposure affects the nervous system. Kidney: caused kidney effects in male rats which are not considered relevant to humans Peripheral nervous system: causes peripheral neuropathy which can be potentiated by ketones. (n-Hexane)

Mutagenicity : Not expected to be mutagenic.

Carcinogenicity : Tumours produced in animals are not considered relevant to humans. (Solvent Naphtha (Petroleum), Light Aliphatic)

Reproductive and Developmental Toxicity: Causes foetotoxicity in animals at doses which are maternally toxic. Affects reproductive system in animals at doses which produce other toxic effects. (n-Hexane)

Additional Information : Exposure to very high concentrations of similar materials has been associated with irregular heart rhythms and cardiac arrest.

12. ECOLOGICAL INFORMATION

Acute Toxicity

Fish : Expected to be toxic: 1 < LC/EC/IC50 <= 10 mg/l

Aquatic Invertebrates : Expected to be toxic: 1 < LC/EC/IC50 <= 10 mg/l

Algae : Expected to be toxic: 1 < LC/EC/IC50 <= 10 mg/l

Microorganisms : Expected to be toxic: 1 < LC/EC/IC50 <= 10 mg/l

Mobility : Adsorbs to soil and has low mobility.
Floats on water.

Persistence/degradability : Readily biodegradable.
Oxidises rapidly by photo-chemical reactions in air.

Bioaccumulation: Has the potential to bioaccumulate

13. DISPOSAL CONSIDERATIONS

Material Disposal : Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations.
Do not dispose into the environment, in drains or in water courses. Waste product should not be allowed to contaminate soil or water.

Container Disposal : Drain container thoroughly. After draining, vent in a safe place away from sparks and fire. Refer to Section 7 before handling the product or containers. Residues may cause an explosion hazard. Do not puncture, cut or weld uncleaned drums. Send to drum recoverer or metal reclaimer.

Local Legislation : Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.

14. TRANSPORT INFORMATION

ADG

UN number	1268
Proper shipping name	PETROLEUM DISTILLATES, N.O.S.(SOLVENT NAPHTHA)
Class	3
Packing group	II
Hazchem Code	3[Y]E

IMDG

Identification number	UN 1268
Proper shipping name	PETROLEUM DISTILLATES, N.O.S.
Class / Division	3
Packing group	II
Marine pollutant:	No

IATA (Country variations may apply)

UN No. :	1268
Proper shipping name :	Petroleum distillates, n.o.s.
Class / Division :	3
Packing group :	II

Additional Information : This product may be transported under nitrogen blanketing. Nitrogen is an odourless and invisible gas. Exposure to nitrogen may cause asphyxiation or death. Personnel must observe strict safety precautions when involved with a confined space entry.

15. REGULATORY INFORMATION

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

SUSDP Schedule :	5
INV (CN) :	Listed.
TSCA :	Listed.
EINECS :	Listed. 265-192-2
KECI (KR) :	Listed. KE-31661
PICCS (PH) :	Listed.

Hi-Tec Oil Traders Pty Ltd ABN 28 053 837 362
5 Tarlington Place Smithfield NSW 2164
Correspondence: P.O Box 322 Castle Hill NSW 1765
Ph: 1300 796 009 | **Fax:** (02) 9604 1611 | **Email:** hitecoils@hi-tecoils.com.au
www.hi-tecoils.com.au

SAFETY DATA SHEET

: Listed.16. OTHER INFORMATION

CONTACT PERSON/POINT: General Manager 1300 796 009

This information was prepared in good faith from the best information available at the time of issue. It is based on the present level of research and to this extent we believe it is accurate. However, no guarantee of accuracy is made or implied and since conditions of use are beyond our control, all information relevant to usage is offered without warranty. The manufacturer will not be held responsible for any unauthorised use of this information or for any modified or altered versions.

If you are an employer it is your duty to tell your employees, and any others that may be affected, of any hazards described in this sheet and of any precautions that should be taken.

16. OTHER INFORMATION (CONT)

Material Safety Data Sheets are updated frequently. Please ensure you have a current copy.

LITERATURE REFERENCES:

* NOHSC:2011 National Code of Practice for the preparation of Material Safety Data Sheets.
* NOHSC: 1008 Approved Criteria for Classifying Hazardous Substances.
* NOHSC: 10005 List of Designated Hazardous Substances.
* NOHSC: 1005 Control of Workplace Hazardous Substances, National Code of Practice.
* NOHSC: 2007 Control of Workplace Hazardous Substances, National Code of Practice.
* NOHSC: 1003 Exposure Standards for Atmospheric Contaminants in the Occupational Environment, National Exposure Standards.
* NOHSC: 3008 Exposure Standards for Atmospheric Contaminants in the Occupational Environment, Guidance Note.
* NOHSC: 1015 Storage and Handling of Workplace Dangerous Goods, National Standard.
* NOHSC: 2017 Storage and Handling of Workplace Dangerous Goods, National Code of Practice.
* SUSDP: Standard for the Uniform Scheduling of Drugs and Poisons
* ADG: Australian Dangerous Goods Code
* MSDS of component materials.

LAST CHANGE: Supercedes document issued: 15th May 2009
Reason/s for revision: Alignment to NOHSC requirements.

GH417042/2

END OF MSDS