

SAFETY DATA SHEET

VIVASOL X55

Infosafe No.: FMPJQ

ISSUED Date : 29/03/2017

ISSUED by: VIVA ENERGY AUSTRALIA PTY LTD
(FORMERLY: SHELL COMPANY OF AUSTRALIA LTD)

1. IDENTIFICATION

GHS Product Identifier

VIVASOL X55

Product Code

Q2383

Company Name

VIVA ENERGY AUSTRALIA PTY LTD (FORMERLY: SHELL COMPANY OF AUSTRALIA LTD) (ABN 46 004 610 459)

AddressLevel 16, 720 Bourke Street Docklands
VIC 3008 AUSTRALIA**Telephone/Fax Number**

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Emergency phone number

1800 651 818 (Australia) / Poisons Information Centre:13 11 26 (Australia)

Recommended use of the chemical and restrictions on use

Industrial solvent.

2. HAZARD IDENTIFICATION

GHS classification of the substance/mixture

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) including Work, Health and Safety Regulations, Australia.

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Aspiration Hazard: Category 1

Flammable Liquids: Category 2

Hazardous to the Aquatic Environment - Long-Term Hazard: Category 2

Skin Corrosion/Irritation: Category 2

STOT Repeated Exposure: Category 2

STOT Single Exposure: Category 3 (narcotic)

Toxic to Reproduction: Category 2

Signal Word (s)

DANGER

Hazard Statement (s)

H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H361f Suspected of damaging fertility.

H373 May cause damage to organs through prolonged or repeated exposure.

H411 Toxic to aquatic life with long lasting effects.

Pictogram (s)

Flame, Exclamation mark, Health hazard, Environment



Precautionary statement – Prevention

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 dust/fume/gas/mist/vapours/spray.
 P264 Wash contaminated skin thoroughly after handling.
 P271 Use only outdoors or in a well-ventilated area.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement – Response

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P308+P313 IF exposed or concerned: Get medical advice/attention.
 P314 Get medical advice/attention if you feel unwell.
 P331 Do NOT induce vomiting.
 P332+P313 If skin irritation occurs: Get medical advice/attention.
 P362 Take off contaminated clothing and wash before reuse.
 P370+P378 In case of fire: Use carbon dioxide, dry chemical or foam for extinction.
 P391 Collect spillage.

Precautionary statement – Storage

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

Precautionary statement – Disposal

P501 Dispose of contents/container to an approved waste disposal plant..

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Name	CAS	Proportion
Solvent Naphtha, petroleum, light aliphatic	64742- 89- 8	100 %

Preparation Description

Contains 10-30% n-hexane (CAS 110-54-3).

The classification as a carcinogen or mutagen does not apply since the substance contains less than 0.1% w/w benzene (CAS 71-43-2).

4. FIRST-AID MEASURES

Inhalation

If inhaled, remove affected person from contaminated area. Apply artificial respiration if not breathing. Seek medical attention.

Ingestion

Do NOT induce vomiting. Wash out mouth and lips with water. Where vomiting occurs naturally have affected person place head below hip level in order to reduce risk of aspiration. Seek immediate medical attention.

Skin

Remove all contaminated clothing immediately. Wash affected area thoroughly with soap and water. Wash contaminated clothing before reuse or discard. Seek medical attention.

Eye contact

If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing for several minutes until all contaminants are washed out completely. If symptoms develop and/or persist seek medical attention.

First Aid Facilities

Eyewash and normal washroom facilities.

Advice to Doctor

Treat symptomatically.

Other Information

For advice in an emergency, contact a Poisons Information Centre (Phone Australia 131 126) or a doctor at once.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Carbon dioxide, dry chemical or foam.

Hazards from Combustion Products

Under fire conditions this product may emit toxic and/or irritating fumes and gases including carbon monoxide, carbon dioxide and other organic compounds.

Specific Hazards Arising From The Chemical

Highly flammable liquid and vapour. Vapour/air mixtures may ignite explosively. Flashback along the vapour trail may occur. Runoff to sewer may create fire or explosion hazard. Will float and can be reignited on surface water.

Hazchem Code

3YE

Decomposition Temperature

Not available

Precautions in connection with Fire

Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. In case of fire the product may be violently or explosively reactive. Use water spray to disperse vapours. This product should be prevented from entering drains and watercourses.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures

Wear appropriate personal protective equipment and clothing to prevent exposure (see Section 8). Extinguish or remove all sources of ignition and stop leak if safe to do so. Increase ventilation. Evacuate all unprotected personnel. If possible contain the spill. Place inert absorbent, non-combustible material onto spillage. Use clean non-sparking tools to collect the material and place into suitable labelled containers for subsequent recycling or disposal. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Wear appropriate personal protective equipment and clothing to prevent exposure. Handle and use the material in a well-ventilated area, away from sparks, flames and other ignition sources. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Work from suitable, labelled, fire-resistant containers. Open containers carefully as they may be under pressure. Keep containers tightly closed. Flameproof equipment is necessary in areas where the product is being used. Take precautionary measures against static discharges. Earth or bond all equipment. Do not empty into drains. Ensure a high level of personal hygiene is maintained when using this product, that is, always wash hands before eating, drinking, smoking or using the toilet facilities.

Avoid exposure. Do not handle until all safety precautions have been read and understood.

It is recommended that pregnant or breastfeeding women should not handle this product unless adequate exposure protection can be assured at all times. Female personnel planning pregnancy should be made aware of the potential risks.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated area away from sources of ignition, oxidising agents, strong acids, foodstuffs, and clothing. Keep containers closed when not in use, securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks. Have appropriate fire extinguishers available in and near the storage area. Take precautions against static electricity discharges. Use proper grounding procedures. Ensure that storage conditions comply with applicable local and national regulations.

For information on the design of the storeroom, reference should be made to Australian Standard AS1940 - The storage and handling of flammable and combustible liquids.

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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limit values

No exposure standards have been established for this material. However, the available exposure limits for ingredients are listed below:

Hexane:

TWA: 20 ppm, 72 mg/m³

TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.

STEL (Short Term Exposure Limit): The average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

Biological Limit Values

Name: n-hexane

Determinant: 2,5-Hexanedione without hydrolysis

Value: 0.4 mg/L

Specimen: urine

Sampling time: End of shift at end of work week.

Source: American Conference of Industrial Hygienists (ACGIH)

Appropriate Engineering Controls

This substance is hazardous and should be used with a local exhaust ventilation system, drawing vapours away from workers' breathing zone. A flame-proof exhaust ventilation system is required. If the engineering controls are not sufficient to maintain concentrations of vapours/mists below the exposure standards, suitable respiratory protection must be worn. Refer to relevant regulations for further information concerning ventilation requirements.

Refer to AS 1940 - The storage and handling of flammable and combustible liquids and AS/NZS 60079.10.1:2009 Explosive atmospheres - Classification of areas - Explosive gas atmospheres, for further information concerning ventilation requirements.

Respiratory Protection

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements.

Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

Eye Protection

Safety glasses with side shields, chemical goggles or full-face shield as appropriate should be used. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform to relevant regulations.

Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.

Hand Protection

Wear gloves of impervious such as nitrile. For incidental contact/splash protection use gloves made of PVC or neoprene rubber. Final choice of appropriate gloves will vary according to individual circumstances. i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant regulations.

Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

Body Protection

Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

9. PHYSICAL AND CHEMICAL PROPERTIES

Properties	Description	Properties	Description
Form	Liquid	Appearance	Liquid
Colour	Colourless	Odour	Paraffinic Sweet
Decomposition Temperature	Not available	Melting Point	Not available
Boiling Point	66 - 115°C	Solubility in Water	< 0.1 g/l
Solubility in Organic Solvents		pH	Not applicable

	Hydrocarbon solvent(s): miscible.		
Vapour Pressure	15 kPa (20°C) (estimated)	Vapour Density (Air=1)	3.1
Evaporation Rate	Not available	Odour Threshold	Not available
Viscosity	Not available	Pour Point	< -50 °C
Partition Coefficient: n-octanol/water	Low Pow: 4 (approximate)	Density	685 - 730 kg/m ³ (15 C) (ASTM D-4052)
Flash Point	< -20°C (IP 170)	Flammability	Highly flammable
Auto-Ignition Temperature	350°C (ASTM E-659)	Flammable Limits - Lower	1% volume
Flammable Limits - Upper	7.5% volume	Molecular Weight	90 g/mol

10. STABILITY AND REACTIVITY

Chemical Stability

Stable under normal conditions of storage and handling.

Reactivity and Stability

Reacts with incompatible materials

Conditions to Avoid

Heat, open flames and other sources of ignition.

Incompatible materials

Strong oxidising agents.

Hazardous Decomposition Products

Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including carbon monoxide, carbon dioxide and other organic compounds.

Possibility of hazardous reactions

Not available

11. TOXICOLOGICAL INFORMATION

Toxicology Information

Toxicity data for material given below.

Acute Toxicity - Oral

LD50 (Rat): >2000 mg/kg

Acute Toxicity - Inhalation

LC50 (Rat): >20 mg/l/4h

Acute Toxicity - Dermal

LD50 (Rat): >2000 mg/kg

Ingestion

May be fatal if swallowed and enters airways. Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause severe pulmonary injury that may lead to death. May cause irritation to the mouth, throat, esophagus and stomach with symptoms of nausea, abdominal discomfort, vomiting and diarrhoea.

Inhalation

May cause irritation to the mucous membrane and upper airways, especially where vapours or mists are generated. Symptoms include sneezing, coughing, wheezing, shortness of breath, headache, dizziness, drowsiness, nausea and vomiting.

Skin

Causes skin irritation. Skin contact will cause redness, itching and swelling. Repeated exposure may cause skin dryness and cracking and may lead to dermatitis.

Eye

May be irritating to eyes. The symptoms may include redness, itching and tearing.

Respiratory sensitisation

Not expected to be a respiratory sensitizer.

Skin Sensitisation

Not expected to be a skin sensitizer.

Germ cell mutagenicity

Not considered to be a mutagenic hazard.

Carcinogenicity

Not considered to be a carcinogenic hazard.

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

Reproductive Toxicity

Suspected of damaging fertility. Classified as a suspected human reproductive toxicant.

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

STOT-single exposure

May cause drowsiness or dizziness.

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Kidney: caused kidney effects in male rats which are not considered relevant to humans.

Aspiration Hazard

May be fatal if swallowed and enters airways.

Other Information

Peripheral nervous system: causes peripheral neuropathy which can be potentiated by ketones. (n-Hexane)

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

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects.

Persistence and degradability

Expected to be inherently biodegradable.

Oxidises rapidly by photo-chemical reactions in air.

Mobility

Floats on water.

Adsorbs to soil and has low mobility.

Bioaccumulative Potential

Has the potential to bioaccumulate.

Other Adverse Effects

In view of the high rate of loss from solution, the product is unlikely to pose a significant hazard to aquatic life.

Environmental Protection

Do not discharge this material into waterways, drains and sewers.

Acute Toxicity - Fish

Toxic: LL/EL/IL50 1-10 mg/l

Acute Toxicity - Algae

LL/EL/IL50 1-10 mg/l

Acute Toxicity - Other Organisms

Aquatic Invertebrates: Toxic: LL/EL/IL50 1-10 mg/l

Microorganisms: Expected to be toxic: $1 < LC/EC/IC50 \leq 10$ mg/l

13. DISPOSAL CONSIDERATIONS

Disposal considerations

Dispose of waste according to applicable local and national regulations. Labels should not be removed from containers until they have been cleaned. Advise flammable nature. Empty containers may contain flammable residues. Do not cut, puncture or weld on or near containers. Contaminated containers must not be treated as household waste. Containers should be cleaned by appropriate methods and then re-used or disposed of by landfill or incineration as appropriate. Do not incinerate closed containers. Wastes including emptied containers are controlled wastes and should be disposed of in accordance with all applicable local and national regulations. Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected.

14. TRANSPORT INFORMATION

Transport Information

Road and Rail Transport (ADG Code):

This material is a Class 3 - Flammable Liquid according to The Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Class 3 - Flammable Liquids are incompatible in a placard load with any of the following:

- Class 1, Explosives
- Division 2.1, Flammable Gases, (Division 2.1 and Class 3 are incompatible in transport if both are in tanks or other receptacles with a capacity individually exceeding 500 L.)
- Division 2.3, Toxic Gases
- Division 4.2 Spontaneously Combustible Substances
- Division 5.1 Oxidising Agents and Division 5.2, Organic Peroxides
- Class 6 Toxic or Infectious Substances (where the flammable liquid is nitromethane)
- Class 7: Radioactive materials unless specifically exempted

Marine Transport (IMO/IMDG):

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Class/Division: 3

UN No: 1268

Proper Shipping Name: PETROLEUM PRODUCTS, N.O.S. (SOLVENT NAPHTHA, PETROLEUM, LIGHT ALIPHATIC) (MARINE POLLUTANT)

Packing Group: II

EMS : F-E, S-E

Special Provisions: -

Air Transport (ICAO/IATA):

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Class/Division: 3

UN No: 1268

Proper Shipping Name: Petroleum distillates, n.o.s. (Solvent Naphtha, petroleum, light aliphatic)

Packing Group: II

Packaging Instructions (passenger & cargo): 353

Packaging Instructions (cargo only): 364

Hazard Label: Flammable Liquid

Special Provisions: A3

U.N. Number

1268

UN proper shipping name

PETROLEUM DISTILLATES, N.O.S.(SOLVENT NAPHTHA, PETROLEUM, LIGHT ALIPHATIC)

Transport hazard class(es)

3

Packing Group

II

Hazchem Code

3YE

IERG Number

14

IMDG Marine pollutant

Yes

Transport in Bulk

Not available

Special Precautions for User

Not available

15. REGULATORY INFORMATION

Regulatory information

Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Poisons Schedule

S5

Australia (AICS)

All components of this product are listed on the Inventory or exempted.

16. OTHER INFORMATION

Date of preparation or last revision of SDS

SDS Reviewed: March 2017

Supersedes: February 2016

References

Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice.

Standard for the Uniform Scheduling of Medicines and Poisons.

Australian Code for the Transport of Dangerous Goods by Road & Rail.

Model Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.

Workplace exposure standards for airborne contaminants, Safe work Australia.

American Conference of Industrial Hygienists (ACGIH).

Globally Harmonised System of classification and labelling of chemicals.

END OF SDS

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