

FOR FURTHER INFORMATION, PLEASE REFER TO THE SDS

Issue: March 21

PRODUCT: Solvent 100
Other Names: Aromatic hydrocarbon solvent
Uses: Industrial solvent: paint and ink manufacture

UN No.	1268
Dangerous Goods Class	3
Subsidiary Risk	None
Pack Group	III
Hazchem	3Y
Poison Schedule	5

Hazardous Nature:	This product is classified as hazardous under Australian GHS criteria
Hazardous Categories:	Flammable liquids, Cat. 3; Skin corrosion/irritation, Cat. 2; Carcinogenicity, Cat. 1B; Specific target organ toxicity - single exposure, Cat. 3 (respiratory irritation); Specific target organ toxicity - single exposure, Cat. 3 (narcotic effects); Aspiration hazard, Cat. 1, Acute aquatic hazard, Cat. 2; Chronic aquatic hazard, Cat. 2
Exposure Standards:	TWA: Naphthalene: 52 mg/m ³ (10 ppm); Cumene: 125 mg/m ³ (25 ppm); Solvent naphtha (petroleum), light aromatic: 100 mg/m ³ (19 ppm) total hydrocarbon vapour (manufacturer recommendation): STEL: Naphthalene: 79 mg/m ³ (15 ppm); Cumene: 375 mg/m ³ (75 ppm)

Physical Characteristics (Typical)

Section 9 of SDS

Appearance	Clear, colourless liquid
Boiling Point/ Range (°C):	161 - 179
Flash Point (°C):	48
Specific Gravity/ Density (g/ml @ 15°C):	0.88
Chemical Stability:	Stable at room temperature and pressure

Product Ingredients

Section 3 of SDS

Solvent Naphtha (petroleum), light aromatic	64742-95-6	100%
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For further ingredients information, please refer to the full SDS.

GHS Pictograms

Section 2 of SDS



Hazard Statements

Section 2 of SDS

H226: Flammable liquid and vapour
H304: May be fatal if swallowed and enters airways
H350: May cause cancer
H335: May cause respiratory irritation

For further Risk and Safety information, please refer to the full SDS.

DEFINITIONS

Dangerous Goods	Products that are classified as Dangerous for Storage and Transport: these products are allocated a UN No., with accompanying Class, Pack Group, and Sub. Risk, if required. Products that do not have a specific description under the code, but have low flash points, or such, must be classified under their most significant risk, eg. Flammable Goods N.O.S. (Not otherwise specified), UN 1993
Poisonous Substance	Products that are classified under the poisons schedule are a poisonous substance. The proportion of the poison in the product will determine its numerical classification.
Hazardous Substance	Products are considered to be Hazardous if they pose an intrinsic risk to human or environmental health, such as mutagens (able to change DNA), teratogens (able to result in birth defects), carcinogens (able to generate cell abnormalities), etc. Materials are not hazardous substances if they pose risks such as potential for misuse, like flammability, or explosions when heated and ignited.

1. IDENTIFICATION

Product Name:	SOLVENT 100
Other Names:	Aromatic hydrocarbon solvent
Chemical Family:	Aromatic hydrocarbon
Recommended Use:	Industrial solvent: paint and ink manufacture
Supplier:	Sydney Solvents Pty Ltd
ABN:	51 104 642 695
Street Address:	Unit 3, 10 Production Place, Jamisontown NSW 2750
Telephone:	02 4722 5060
Fax:	02 4722 5070
Emergency phone:	CHEMCALL: 1800 127 406

2. HAZARDS IDENTIFICATION**Health Hazard Classification**

This product is classified as hazardous under Australian GHS criteria

Hazard Categories

Flammable liquids, Cat. 3; Skin corrosion/irritation, Cat. 2; Carcinogenicity, Cat. 1B; Specific target organ toxicity - single exposure, Cat. 3 (respiratory irritation); Specific target organ toxicity - single exposure, Cat. 3 (narcotic effects); Aspiration hazard, Cat. 1, Acute aquatic hazard, Cat. 2; Chronic aquatic hazard, Cat. 2

Hazardous Statement

Flammable Liquid and Vapour

GHS Pictograms**Hazard Statements**

- H226: Flammable liquid and vapour
- H304: May be fatal if swallowed and enters airways
- H350: May cause cancer
- H335: May cause respiratory irritation
- H336: May cause drowsiness or dizziness

Precautionary Statements

- P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P233: Keep container tightly closed. P240: Ground/bond container and receiving equipment. P241: Use explosion-proof electrical/ventilating/light/.../equipment. P242: Use only non-sparking tools. P243: Take precautionary measures against static discharge.
- P261: Avoid breathing dust/fume/ gas/mist/vapours/spray.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.
- P301+310: IF SWALLOWED: Immediately call a POISON CENTER/doctor/... P331: Do NOT induce vomiting.
- P303+361+353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
- P304+340: IF INHALED: Remove person to fresh air and keep comfortable for breathing. P312: Call a POISON CENTER or doctor/ physician if you feel unwell

Dangerous Goods Classification 3

Poisons Schedule 5

Signal Word DANGER

3. COMPOSITION: Information on Ingredients

Chemical Ingredient	CAS No.	Proportion (%v/v)
Solvent Naphtha (petroleum), light aromatic	64742-95-6	100
Contains: 1,2,4 Trimethyl benzene	95-63-6	30 - 35
Mesitylene	108-67-8	< 10
Propylbenzene and Isopropylbenzene (Cumene)	98-82-8	< 5
Naphthalene	91-20-3	< 1

4. FIRST AID MEASURES

For advice, contact Poisons Information Centre (Phone Australia: 13 1126) or a doctor.

Ingestion

If swallowed, DO NOT induce vomiting. Keep at rest. Seek immediate medical attention.

Eye Contact

Flush eyes with large amounts of water until irritation subsides. Seek immediate medical attention.

Skin Contact

Flush area with large amounts of water and wash area with soap if available. Remove contaminated clothing, including shoes, and launder before reuse. Seek medical attention for skin irritations.

Inhalation

Using proper respiratory protection, immediately remove the affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest. Seek immediate medical attention.

First Aid facilities

Provide eye baths and safety showers.

Medical Attention

Treat according to symptoms. Avoid gastric lavage: risk of aspiration of product to the lungs with the potential to cause chemical pneumonitis.

5. FIRE FIGHTING MEASURES

Shut off product that may 'fuel' a fire if safe to do so. Allow trained personnel to attend a fire in progress, providing firefighters with this Material Safety Data Sheet. Prevent extinguishing media from escaping to drains and waterways.

Suitable extinguishing media

Water fog, foam, dry chemical or carbon dioxide.

Do not use straight streams of water

Hazards from combustion products

Carbon dioxide and carbon monoxide

Precautions for fire fighters and special protective equipment

Full protective clothing and self-contained breathing apparatus

Hazchem Code:

3Y

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures

Prevent fluid from escaping to drains and waterways. Contain leaking packaging in a containment drum. Prevent vapours from building up in confined areas. Ensure that drain valves are closed at all times. Clean up and report spills immediately.

Methods and materials for containment

Major Land Spill

- Eliminate sources of ignition.
- Warn occupants of downwind areas of possible fire and explosion hazard.
- Prevent liquid from entering sewers, watercourses, or low-lying areas.
- Keep the public away from the area.
- Shut off the source of the spill if possible and safe to do so.
- Advise authorities if substance has entered a watercourse or sewer or has contaminated soil or vegetation.
- Take measures to minimise the effect on the ground water.
- Contain the spilled liquid with sand or earth.
- Recover by pumping – use explosion proof pump or hand pump – or with a suitable absorbent material.
- Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.
- See “First Aid Measures” and “Stability and Reactivity”

Major Water Spill

- Eliminate any sources of ignition.
- Warn occupants and shipping in downwind areas of possible fire and explosion hazard.
- Notify the port or relevant authority and keep the public away from the area.
- Shut off the source of the spill if possible and safe to do so.
- Confine the spill if possible.
- Remove the product from the surface by skimming or with suitable absorbent material.
- Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.
- See “First Aid Measures” and “Stability and Reactivity”.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid inhaling vapour and contact with skin and eyes. Use only with adequate ventilation. Wear personal protective equipment. Prevent small spills and leakages to avoid slip hazard.

This product is flammable. Do not open near open flame, sources of heat or ignition. NO SMOKING. Keep container closed when not in use. Handle containers with care. Open slowly to control possible pressure release. Material will accumulate static charge which may cause an electrical spark (ignition source). Use bonding and/or earthing measures to avoid discharge (electrical spark) but note this may not eliminate hazard.

Do not pressurise, cut, heat or weld containers - residual vapours are flammable. This product will fuel a fire in progress.

Conditions for safe storage

Store in tightly closed original container in a dry, cool and well-ventilated place. Storage containers should be earthed and bonded. Fixed storage containers, transfer containers and associated equipment should be earthed and bonded to prevent accumulation of static charge.

Incompatible materials

Natural rubber, Butyl rubber, EPDM, polystyrene, polyethylene, polypropylene, polyacrylonitrile, PVC.

8. EXPOSURE CONTROLS: PERSONAL PROTECTION

National Exposure Standards

The time weighted average concentration (TWA) for this product is: Naphthalene: 52 mg/m³ (10 ppm); Cumene: 125 mg/m³ (25 ppm); Solvent naphtha (petroleum), light aromatic: 100 mg/m³ (19 ppm) total hydrocarbon vapour (manufacturer recommendation), which means the highest allowable exposure concentration in an eight-hour day for a five-day working week. The short-term exposure limit (STEL) is: Naphthalene: 79 mg/m³ (15 ppm); Cumene: 375 mg/m³ (75 ppm), which is the maximum allowable exposure concentration at any time.

Biological limit values

Not available

Engineering Controls: Ventilation

The use of local exhaust ventilation is recommended to control process emissions near the source. Laboratory samples should be handled in a fume hood. Provide mechanical ventilation of confined spaces. Use explosion-proof ventilation equipment.

Personal Protective Equipment

Respiratory Protection: Where concentrations in air may exceed the limits described in the National Exposure Standards, it is recommended to use a half-face filter mask to protect from overexposure by inhalation. A type "A" filter material is considered suitable for this product.

Eye Protection: Always use safety glasses or a face shield when handling this product.

Skin/ Body Protection: Always wear long sleeves and long trousers or coveralls, and enclosed footwear or safety boots when handling this product. It is recommended that chemical resistant gloves (e.g. PVC) be worn when handling this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Property	Unit of measurement	Typical value
Appearance	-	Clear, colourless liquid
Boiling Point/ Range	°C	161 - 179
Flash Point	°C	48
Density @ 15°C	g/ml	0.88
Vapour Pressure @ 20°C	kPa	0.2
Explosive Limits (LEL – UEL)	%	1.0 – 7.0
Vapour Density @ 101 kPa (Air = 1)	-	4.2
Autoignition Temperature	°C	475
Viscosity @ 40°C	cSt	0.8
@20°C		1
Percent Volatiles	%	100
Solubility with Water	% w/w	Negligible

The values listed are indicative of this product's physical and chemical properties. For a full product specification, please consult the Product Data Sheet.

10. STABILITY AND REACTIVITY**Chemical Stability**

Stable at room temperature and pressure

Conditions to avoid

Sources of heat and ignition, open flames.

Hazardous decomposition products

Carbon monoxide, carbon dioxide, and other organic complexes on incomplete burning or oxidation

Hazardous reactions

Oxidizing agents, mineral acids, halogenated organic compounds

Hazardous Polymerisation

Will not occur

11. TOXICOLOGICAL INFORMATION**Acute Effects*****Ingestion***

May be harmful if ingested. Small amounts of liquid aspirated into the lungs during ingestion, or from vomiting, may cause chemical pneumonitis, or pulmonary oedema.

Eye Contact

This product is mildly irritating to eyes, with short lasting discomfort, but will not permanently damage the eye tissue. Vapour concentrations are irritating to eyes.

Skin Contact

This product mildly is irritating to the skin with prolonged exposure. It may result in dryness and cracking.

Inhalation

Inhalation of this product in large quantities will result in moderate discomfort. Vapour concentrations are irritating the respiratory tract, may cause headaches and dizziness, are anaesthetic and may have other central nervous system effects.

Chronic Effects

Repeated or prolonged contact may result in dryness or defatting of the skin. Persons with pre-existing skin and respiratory conditions may be sensitive to this product.

Other Health Effects Information

Contains naphthalene (<1%): Exposure to high concentrations of naphthalene may cause destruction of red blood cells, anemia, and cataracts. Naphthalene caused cancer in laboratory animal studies, but the relevance of these findings to humans is uncertain. Contains 1- 5% cumene. Cumene is classified in Australia as a known or presumed human carcinogen.

Toxicological Information

LD₅₀ (oral, rat): 3592 mg/kg

Naphthalene: LD₅₀ (oral, rat): 490 mg/kg; LD₅₀ (dermal, rat): 1120 mg/kg

LC₅₀ (inhalation, rat, max. attainable vapour conc.) >6193 mg/m³/4 h

12. ECOLOGICAL INFORMATION**Ecotoxicity****Aquatic Toxicity**

Fish Toxicity (rainbow trout, goldfish, bluegill):

Trimethyl benzene: Fathead minnow (LC₅₀): 7.72 mg/L;
Naphthalene: Bluegill: LC₅₀: 31.026 mg/L; Pink Salmon: LC₅₀:
0.9 mg/L; Crimson Spotted rainbow trout: LC₅₀: 0.315 mg/L

Daphnia Magna EC₅₀ (24 hr):

Cumene (LC₅₀): 34.3 mg/L

Blue-green algae (Toxicity threshold 7-8 days):

Not available

Green algae (Toxicity threshold 7-8 days):

Cumene (EC₅₀): 2.6 mg/L

Persistence/ degradability

Expected to be biodegradable. Not expected to bioaccumulate significantly.

Mobility

This product is highly volatile and will partition rapidly in air. Not expected to partition to sediment and wastewater solids.

13. DISPOSAL CONSIDERATIONS**Disposal Methods**

Empty packaging should be taken for recycling, recovery or disposal through a suitably qualified or licensed contractor. Care should be taken to ensure compliance with national and local authorities. Packaging may still contain fumes and vapours that are flammable and harmful. Ensure that empty packaging is allowed to dry.

Special Precautions for Landfill or Incineration

This product is NOT suitable for disposal by either landfill or via municipal sewers, drains, natural streams or rivers. This product is ashless and can be burned directly in appropriate equipment.

14. TRANSPORT INFORMATION

Road and Rail Transport		Marine Transport		Air Transport	
UN No.	1268	UN No.	1268	UN No.	1268
Proper Shipping Name	PETROLEUM DISTILLATES, N.O.S.	Proper Shipping Name	PETROLEUM DISTILLATES, N.O.S.	Proper Shipping Name	PETROLEUM DISTILLATES, N.O.S.
DG Class	3	DG Class	3	DG Class	3
Sub. Risk	None	Sub. Risk	None	Sub. Risk	None
Pack Group	III	Pack Group	III	Pack Group	III
Hazchem	3Y	Hazchem	3Y	Hazchem	3Y

Dangerous Goods Segregation

This product is classed as Dangerous Goods Class 3, packing group III. Please consult the Australian Dangerous Goods Code for Transport by Road and Rail for information.

Marpol 73/78 Convention – Annex II

Product Name: NOXIOUS LIQUID, N.F. (5) N.O.S., (Solvesso 100, contains Alkyl (C3-C4) benzenes)

Ship Type: 2

Pollution: Y

15. REGULATORY INFORMATION

Country/ Region: Australia

Inventory: AICS

Status: Listed

Poisons Schedule: 5

16. OTHER INFORMATION

Reasons for Issue: GHS classification amended

Abbreviations:

AICS: Australian Inventory of Chemical Substances

CAS Number: Chemical Abstracts Number

IARC: International Agency for Research on Cancer

NOHSC: National Occupational Health and Safety Council

GHS: Global Harmonised System

References:

- Supplier Material Safety Data Sheets
- <http://chem.sis.nlm.nih.gov/chemidplus> (March 21)
- <http://hsis.ascc.gov.au/SearchHS.aspx> (March 21)
- Ecotoxicology data: http://cfpub.epa.gov/ecotox/quick_query.htm (March 21)
- *Sax's Dangerous Properties of Industrial Materials*, Richard J. Lewis Snr., pub. Canada (2000)

The information sourced for the preparation of this document was correct and complete at the time of writing to the best of the writer's knowledge. The document represents the commitment to the company's responsibilities surrounding the supply of this product, undertaken in good faith. This document should be taken as a safety guide for the product and its recommended uses, but is in no way an absolute authority. Please consult the relevant legislation and regulations governing the use and storage of this type of product. For further information, please contact Sydney Solvents Pty Ltd.