

**FOR FURTHER INFORMATION, PLEASE REFER TO THE SDS**

Issue: December 20

**PRODUCT:** Solvent 1425

**Other Names:** Mixed heptanes

**Uses:** Industrial solvent: cleaning and degreasing

**Signal Word:** DANGER

|                              |      |
|------------------------------|------|
| <b>UN No.</b>                | 1206 |
| <b>Dangerous Goods Class</b> | 3    |
| <b>Subsidiary Risk</b>       | None |
| <b>Pack Group</b>            | II   |
| <b>Hazchem</b>               | 3YE  |
| <b>Poison Schedule</b>       | 5    |

|                                  |   |
|----------------------------------|---|
| <b>Hazardous Nature:</b>         | This product is classified as hazardous under GHS for Australia criteria  |
| <b>Hazardous Classification:</b> | Flammable Liquids: 2; Aspiration Hazard: 1; Skin Corrosion/Irritation: 2; Specific Target Organ Toxicity (Single Exposure - Narcotic Effects): 3; Specific Target Organ Toxicity (Repeated Exposure): 2; Aquatic Toxicity - Acute: 1; Aquatic Toxicity - Chronic: 1 |
| <b>Hazardous Statement:</b>      | Highly Flammable liquid and vapour  |
| <b>Exposure Standards:</b>       | TWA: n-heptane: 1640 mg/m <sup>3</sup> (400 ppm); STEL: n-heptane: 2050 mg/m <sup>3</sup> (500 ppm)   |

**Physical Characteristics (Typical)** Section 9 of SDS

|  |   |
|--|---|
| Appearance                               | Clear, colourless liquid                |
| Boiling Point/ Range (°C):               | 85-100                                  |
| Flash Point (°C):                        | -17                                     |
| Specific Gravity/ Density (g/ml @ 15°C): | 0.69                                    |
| Chemical Stability:                      | Stable at room temperature and pressure |

**Product Ingredients** Section 3 of SDS

|                     |          |       |
|---------------------|----------|-------|
| Heptane and Isomers | Various  | >80%  |
| Isohexanes          | 107-83-5 | < 15% |

For further ingredients information, please refer to the full SDS.

**GHS Pictograms** Section 2 of SDS


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**

|                             |   |
|-----------------------------|---|
| <b>Product Name:</b>        | <b>Solvent 1425</b>                               |
| <b>Other Names:</b>         | Mixed heptanes                                    |
| <b>Chemical Family:</b>     | Aliphatic, cycloparaffinic hydrocarbon            |
| <b>Recommended Use:</b>     | Industrial solvent: cleaning and degreasing       |
| <b>Supplier:</b>            | Sydney Solvents Pty Ltd                           |
| <b>ABN:</b>                 | 51 104 642 695                                    |
| <b>Street Address:</b>      | Unit 3, 10 Production Place, Jamisontown NSW 2750 |
| <b>Telephone:</b>           | 02 4722 5060                                      |
| <b>Fax:</b>                 |   |
| <b>Emergency phone:</b>     | <b>CHEMCALL:</b> 1800 605 040                     |
| <b>All other inquiries:</b> | 02 4722 5060                                      |

**2. HAZARDS IDENTIFICATION****Hazardous Nature**

This product is classified as hazardous under GHS for Australia criteria

**Hazardous Classification**

Flammable Liquids: 2; Aspiration Hazard: 1; Skin Corrosion/Irritation: 2; Specific Target Organ Toxicity (Single Exposure - Narcotic Effects): 3; Specific Target Organ Toxicity (Repeated Exposure): 2; Aquatic Toxicity - Acute: 1; Aquatic Toxicity – Chronic: 1

**Hazardous Statement**

Highly Flammable liquid and vapour

**GHS Pictograms****Hazard Statements**

H225: Highly flammable liquid and vapour

H304: May be fatal if swallowed and enters airways

H315: Causes skin irritation

H335: May cause respiratory irritation

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

H410: Very toxic to aquatic life with long lasting effects

**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.

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P264: Wash ... thoroughly after handling.

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

P370+378: In case of fire: use foam, carbon dioxide, dry earth or sand to extinguish

**Dangerous Goods Classification 3**

**Poisons Schedule 5**

**Signal Word DANGER**

### 3. COMPOSITION: Information on Ingredients

| Chemical Ingredient | CAS No.  | Proportion (%v/v) |
|---------------------|----------|-------------------|
| Heptane and Isomers | Various  | >80               |
| Isohexanes          | 107-83-5 | < 15              |

### 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 Safety Data Sheet. Prevent extinguishing media from escaping to drains and waterways.

#### Suitable extinguishing media

Foam, dry chemical powder, carbon dioxide or dry sand. Water spray or fog for large fires.

Do not use a solid water stream as it may scatter and spread fire.

#### 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:** 3YE

## 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

This product is flammable. Do not open near open flame, sources of heat or ignition. No smoking. Keep container closed. Handle containers with care. Open slowly to control possible pressure release. Material will accumulate static charge. Use grounding leads to avoid discharge (electrical spark).

Use only with adequate ventilation and avoid breathing vapour. Observe good industrial hygiene practices.

### Conditions for safe storage

Store in a cool, dry place away from direct sunlight. Do not pressurise, cut, heat or weld containers - residual vapours are flammable. This product is flammable and will fuel a fire in progress.

### Incompatible materials

Natural Rubber, Butyl Rubber, EPDM, Polystyrene, oxidising agents, strong acids.

## 8. EXPOSURE CONTROLS: PERSONAL PROTECTION

### National Exposure Standards

The time weighted average concentration (TWA) for this product is: n-heptane: 1640 mg/m<sup>3</sup> (400 ppm), 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: n-heptane: 2050 mg/m<sup>3</sup> (500 ppm), which is the maximum allowable exposure concentration at any time. Products may be identified as skin sensitisers, indicated as (Sen), which means that the product will induce ever-increasing adverse effects with subsequent exposure, such as loss of feeling in extremities, or pain or irritation on contact with the product. Where (Sk) appears, the product will be easily absorbed to the skin, risking overexposure and symptoms similar to Ingestion or Inhalation. applies in this case. Refer: Section 11: Toxicological Effects.

### 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                  | 85-100                   |
| Flash Point                  | °C                  | -17                      |
| Density @ 15°C               | g/ml                | 0.69                     |
| Vapour Pressure @ 20°C       | kPa                 | No data available        |
| Explosive Limits (LEL – UEL) | %                   | 1.0 – 8.0                |
| Vapour Density @ 20°C        | kPa                 | Not available            |
| Autoignition Temperature     | °C                  | > 200                    |
| Viscosity @ 20°C             | cSt                 | Not applicable           |
| Percent Volatiles            | %                   | 100                      |
| Solubility with Water        | % w/w               | Not available            |

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**

None anticipated. Avoid contact with oxidizing agents, mineral acids, halogenated organic compounds.

**Hazardous Polymerisation**

Will not occur

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

Produces hallucinations and narcotic effect. Ingestion of large amounts will result in drowsiness, fatigue, loss of appetite, paresthesia in distal extremities (tingling in hands and feet). Possibility of muscle weakness, cold pulsation in

extremities (hands and feet), blurred vision, headache, and nausea. Vomiting may cause this product to be aspirated to the lungs resulting in chemical pneumonitis or pulmonary oedema.

#### **Eye Contact**

This product is irritating to eyes, but will not permanently damage the eye tissue

#### **Skin Contact**

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

#### **Inhalation**

This product is irritating to the respiratory tract. Exposure to large concentrations over an extended period of time will result in muscle weakness, tingling in hands and feet, blurred vision, headaches, nausea, loss of appetite, hallucinations, and possible loss of consciousness.

#### **Chronic Effects**

There is evidence of potentially irreversable damage to the peripheral nervous system, particularly arms and legs.

#### **Other Health Effects Information**

This product contains isomers of heptane which have fewer health effects than products containing hexanes; although the same precautions to minimise inhalation and skin exposures should be observed.

#### **Toxicological Information**

Heptane: LC<sub>50</sub>: 103 g/m<sup>3</sup> (4H, inhalation, rat)

Heptane: 1000 ppm (inhalation, human)

## 12. ECOLOGICAL INFORMATION

#### **Ecotoxicity**

##### **Aquatic Toxicity**

Fish Toxicity (rainbow trout, goldfish, bluegill):

Isoheptane: LC<sub>50</sub> 0.961 mg/L/96 h, n-heptane: LC<sub>50</sub> 375 mg/L/96 h

Daphnia Magna EC<sub>50</sub> (24 hr):

Isoheptane: EC<sub>50</sub> 2.212 mg/L/48 h, n-Heptane: LC<sub>50</sub> = 2500 mg/L/96 h

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

No data available

Green algae (Toxicity threshold 7-8 days):

Isoheptane: EC<sub>50</sub> 1.526 mg/L/96 h

#### **Persistence/ degradability**

Readily biodegradable. Oxidises rapidly by photo-chemical reactions in air. Does not bioaccumulate significantly.

#### **Mobility**

This product is highly volatile and will rapidly evaporate to the air if released into the water

## 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 must be disposed as chemical waste in accordance with the local authority.

## 14. TRANSPORT INFORMATION

| Road and Rail Transport |          | Marine Transport     |          | Air Transport        |          |
|-------------------------|----------|----------------------|----------|----------------------|----------|
| UN No.                  | 1206     | UN No.               | 1206     | UN No.               | 1206     |
| Proper Shipping Name    | HEPTANES | Proper Shipping Name | HEPTANES | Proper Shipping Name | HEPTANES |
| DG Class                | 3        | DG Class             | 3        | DG Class             | 3        |

|            |      |            |      |            |      |
|------------|------|------------|------|------------|------|
| Sub. Risk  | None | Sub. Risk  | None | Sub. Risk  | None |
| Pack Group | II   | Pack Group | II   | Pack Group | II   |
| Hazchem    | 3YE  | Hazchem    | 3YE  | Hazchem    | 3YE  |

**Dangerous Goods Segregation**

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

**15. REGULATORY INFORMATION**

**Country/ Region:** Australia

**Inventory:** AICS

**Status:** Listed

**Poisons Schedule:** 5

**16. OTHER INFORMATION**

**Reasons for Issue:** 5 year update. GHS classification and hazard statements updated

**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

**References:**

- Supplier Safety Data Sheets
- <http://chem.sis.nlm.nih.gov/chemidplus> (December 20)
- <https://www.nicnas.gov.au/> (December 20)
- OECD eChemPortal Substance Search  
<https://www.echemportal.org/echemportal/participant/page.action?pageID=9>

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