

#### 1. IDENTIFICATION

Product Name Solvent D60

Other Names Distillates (petroleum), hydrotreated light; Redsol D60

Uses Uses in Coatings, Use in Cleaning Agents, Lubricant, Metalworking fluid, Rolling oil, Use as binders and release agents,

Use as a fuel, Lamp oil, Barbecue lighter, Functional Fluids, Road and construction applications, Laboratory activities,

Polymer processing.

Chemical Family No Data Available
Chemical Formula Unspecified

**Chemical Name** Distillates, petroleum, hydrotreated light

**Product Description** A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a

catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in

the range of approximately 150 °C to 290 °C.

# **Contact Details of the Supplier of this Safety Data Sheet**

Organisation	Location	Telephone
Redox Ltd	2 Swettenham Road Minto NSW 2566 Australia	+61-2-97333000
Redox Ltd	11 Mayo Road Wiri Auckland 2104 New Zealand	+64-9-2506222
Redox Inc.	3960 Paramount Boulevard Suite 107 Lakewood CA 90712 USA	+1-424-675-3200
Redox Chemicals Sdn Bhd	Level 2, No. 8, Jalan Sapir 33/7 Seksyen 33, Shah Alam Premier Industrial Park 40400 Shah Alam Sengalor, Malaysia	+60-3-5614-2111

#### **Emergency Contact Details**

For emergencies only; DO NOT contact these companies for general product advice.

Organisation	Location	Telephone
Poisons Information Centre	Westmead NSW	1800-251525 131126
Chemcall	Australia	1800-127406 +64-4-9179888
Chemcall	Malaysia	+64-4-9179888
Chemcall	New Zealand	0800-243622 +64-4-9179888
National Poisons Centre	New Zealand	0800-764766
CHEMTREC	USA & Canada	1-800-424-9300 CN723420 +1-703-527-3887



# 2. HAZARD IDENTIFICATION

Poisons Schedule (Aust) Schedule 5

**Globally Harmonised System** 

Hazard Classification Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of

Chemicals (GHS)

Hazard Categories Flammable Liquids - Category 4

Aspiration Hazard - Category 1

**Pictograms** 

Signal Word Danger

Hazard Statements H227 Combustible liquid.

**H304** May be fatal if swallowed and enters airways.

**AUH066** Repeated exposure may cause skin dryness or cracking

**Precautionary Statements** Prevention **P210** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

**P280** Wear protective gloves/protective clothing/eye protection/face protection.

Response P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor.

**P331** Do NOT induce vomiting.

**P370 + P378** In case of fire: Use carbon dioxide (CO2), dry chemical or foam for extinction.

Storage **P405** Store locked up.

**P403** Store in a well-ventilated place.

Disposal P501 Dispose of contents/container in accordance with local / regional / national /

international regulations.

# **National Transport Commission (Australia)**

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification NOT Dangerous Goods according to the Criteria of the Australian Code for the Transport of Dangerous Goods

by Road & Rail (ADG Code)

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

## Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Distillates, petroleum, hydrotreated light	Unspecified	64742-47-8	100 %

## 4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a Poison Centre or doctor/physician for advice. If

vomiting occurs spontaneously, lean patient forward or place on left side (head-down position if possible) to maintain

open airway and prevent aspiration. Never give anything by mouth to an unconscious person.

\*Risk of product entering the lungs on vomiting after ingestion. In this case, the casualty should be sent immediately to

hospital!

Eye IF IN EYES: Immediately flush eyes with running water for several minutes, holding eyelids open and occasionally lifting

the upper and lower lids. Remove contact lenses if present and easy to do. Continue rinsing for at least 15 minutes. If eye

irritation persists, get medical advice/attention.

IF ON SKIN: Remove and isolate contaminated clothing and shoes. Wash skin with plenty of soap and water. If skin Skin

irritation occurs, get medical advice/attention. Wash contaminated clothing and shoes before reuse.

Inhaled IF INHALED: Remove victim to fresh air and keep warm and at rest in a position comfortable for breathing. If respiratory

> symptoms persist, get medical advice/attention. Give artificial respiration if victim is not breathing. Do not use mouth-tomouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Administer oxygen if breathing is difficult.

**Advice to Doctor** Treat symptomatically. Ensure that medical personnel are aware of the material(s) involved and take precautions to

protect themselves.

\*If swallowed accidentally, the product may enter the lungs due to its low viscosity and lead to the rapid development of

very serious pulmonary lesions (medical survey during 48 hours).

Medical Conditions Aggravated by Repeated exposure may cause skin dryness or cracking.

**Exposure** 

#### **5. FIRE FIGHTING MEASURES**

**General Measures** If safe to do so, move undamaged containers from fire area. Cool containers with water spray until well after fire is out.

Dike fire-control water for later disposal.

**Flammability Conditions** Combustible liquid; May burn but does not ignite readily.

**Extinguishing Media** Use dry chemical, Carbon dioxide (CO2), foam or water spray for extinction - Do not use a solid water stream as it may

scatter and spread fire.

Fire and Explosion Hazard Containers may explode when heated.

**Hazardous Products of** 

Combustion

Incomplete combustion and thermolysis may produce gases of varying toxicity, such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high

concentration.

**Special Fire Fighting Instructions** Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only **Personal Protective Equipment** 

provide limited protection.

Flash Point 60 - 75 °C [ASTM D 93]

**Lower Explosion Limit** 0.6 % **Upper Explosion Limit** 5.5 % **Auto Ignition Temperature** 238 °C

**Hazchem Code** No Data Available

#### **6. ACCIDENTAL RELEASE MEASURES**

**General Response Procedure** Ensure adequate ventilation, especially in confined areas. ELIMINATE all ignition sources (no smoking, flares, sparks or

> flames in immediate area). Stop all work that requires a naked flame, stop all vehicles, stop all machines and equipment that may cause sparks or flames. Do not touch or walk through spilled material - Contaminated surfaces will be extremely

slippery! Avoid breathing vapours and contact with eyes, skin and clothing.

**Clean Up Procedures** Pick up with sand or other non-combustible absorbent material and place into containers for later disposal (see SECTION

13).

\*Use non-sparking handtools and explosionproof electrical equipment!

Containment Stop leak if safe to do so - Prevent entry into waterways, drains or confined areas. Dike to collect large liquid spills.

Decontamination Following product recovery, flush area with water.

**Environmental Precautionary** 

Measures

The product should not be allowed to enter drains, water courses or the soil. Local authorities should be advised if

significant spillages cannot be contained.

**Evacuation Criteria** Spill or leak area should be isolated immediately. Evacuate non-essential personnel. Keep unauthorised personnel away.

## 7. HANDLING AND STORAGE

Handling Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure

adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Avoid breathing mist/vapours and contact with eyes, skin and clothing. Do not ingest. Use personal protective equipment as required (see SECTION 8). Combustible liquid: Handle away from heat (hot manifolds or casings) and any source of ignition (open flames and sparks); No smoking. Take precautionary measures against static discharges. Do not use compressed air for filling, discharging or handling. Do not spray at high pressure (>3 bar). To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Do not allow splash loading and ensure that the product is

poured slowly, particularly at the beginning of the operation.

\*To avoid risk of explosion - Operate only in cold and degassed tanks, in ventilated premises.

Store at room temperature in a cool, dry and well-ventilated place, out of direct sunlight. Keep containers tightly closed Storage

> and properly labelled. Keep away from heat, hot surfaces and all sources of ignition - No smoking. Ground/bond containers, tanks and transfer/receiving equipment. Keep away from incompatible materials (see SECTION 10). Store locked up. Storage installations should be designed with adequate bunds so as to prevent ground or water pollution in

case of leaks or spills.

Container Keep only in the original container or in a suitable container for this kind of product.

\*Recommended materials for containers, or container linings: use mild steel, stainless steel.

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General No specific exposure standards are available for this product. For Oil mist, refined mineral:

- Safe Work Australia Exposure Standard: TWA = 5 mg/m3.

- New Zealand Workplace Exposure Standard: TWA = 5 mg/m3; STEL = 10 mg/m3 (Sampled by a method that does not

- NIOSH REL/OSHA PEL: TWA = 5 mg/m3; STEL = 10 mg/m3.

- Immediately dangerous to life or health (IDLH) concentration: 2,500 mg/m3.

**Exposure Limits** No Data Available

**Biological Limits** No information available.

**Engineering Measures** Apply technical measures to comply with the occupational exposure limits. A system of local and/or general exhaust is

recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.

\*Use explosion-proof electrical/ventilating/lighting equipment.

- Respiratory protection: In case of inadequate ventilation, wear respiratory protection. Recommended: When working in **Personal Protection Equipment** confined spaces (tanks, containers, etc), ensure that there is a supply of air suitable for breathing and wear the

recommended equipment. For rescue and maintenance work in storage tanks, use self-contained breathing apparatus.

- Eye/face protection: Wear appropriate eye protection to avoid eye contact. Recommended: Safety glasses with sideshields.

- Hand protection: Wear protective gloves. Recommended: Impermeable gloves (aliphatic hydrocarbon resistant), e.g. Polyvinyl chloride.

- Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. Recommended: Overalls; Protective shoes or boots.

\*Protective engineering solutions should be implemented and in use before personal protective equipment is considered. These recommendations apply to the product as supplied; If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers.

**Special Hazards Precaustions** 

When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

\*Design the installations in order to avoid accidental emissions of product (due to seal breakage, for example) onto hot casings or electrical contacts. Design installations (machinery and equipment) to prevent burning product from spreading (tanks, retention systems, interceptors (traps) in drainage systems).

**Work Hygienic Practices** 

When using, do not eat, drink or smoke. Wash hands before breaks and at the end of workday. Do not dry hands with rags that have been contaminated with product. Do not use abrasives, solvents or fuels. Regular cleaning of equipment, work area and clothing is recommended.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Liquid
Appearance Liquid

OdourHydrocarbon-likeColourColourlesspHNo Data Available

Vapour Pressure <=0.3 hPa (@ 20 °C)

**Relative Vapour Density** 4.5 Air = 1

**Boiling Point** 187 - 210 °C [ASTM D 86]

Melting Point <0 °C

Freezing Point

No Data Available

Solubility

15 mg/l water 20°C

**Specific Gravity** 0.75 - 0.89

**Flash Point** 60 - 75 °C [ASTM D 93]

238 °C **Auto Ignition Temp** <1 (EtEt = 1) **Evaporation Rate Bulk Density** No Data Available **Corrosion Rate** No Data Available **Decomposition Temperature** No Data Available Density 750 - 890 kg/m3 **Specific Heat** No Data Available **Molecular Weight** No Data Available **Net Propellant Weight** No Data Available **Octanol Water Coefficient** 3.3 (logPow) **Particle Size** No Data Available **Partition Coefficient** No Data Available **Saturated Vapour Concentration** No Data Available **Vapour Temperature** No Data Available 1.27 mm2/s (@ 40 °C) Viscosity

Additional Characteristics No information available.

Potential for Dust Explosion Not applicable.

Fast or Intensely Burning

Characteristics

**Volatile Percent** 

**VOC Volume** 

No information available.

No Data Available

No Data Available

Flame Propagation or Burning

Rate of Solid Materials

No information available.

**Non-Flammables That Could** Contribute Unusual Hazards to a Fire

No information available.

**Properties That May Initiate or** Contribute to Fire Intensity

Combustible liquid; May burn but does not ignite readily.

**Reactions That Release Gases or** 

Vapours

Incomplete combustion and thermolysis may produce gases of varying toxicity, such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high

concentration.

**Release of Invisible Flammable** 

Vapours and Gases

No information available.

#### 10. STABILITY AND REACTIVITY

**General Information** No information available.

**Chemical Stability** Stable under recommended storage conditions.

**Conditions to Avoid** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Take precautionary measures against

static discharge.

**Materials to Avoid** Incompatible/reactive with strong acids, oxidising agents.

**Hazardous Decomposition** 

**Products** 

Incomplete combustion and thermolysis may produce gases of varying toxicity, such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high

concentration.

**Hazardous Polymerisation** No information available.

#### 11. TOXICOLOGICAL INFORMATION

#### **General Information**

- Acute toxicity: Not classified. Ingestion may cause abdominal pain, gastrointestinal irritation, nausea, vomiting and diarrhoea. May cause central nervous system depression. If swallowed accidentally, the product may enter the lungs due to its low viscosity and lead to the rapid development of very serious pulmonary lesions.
- Skin corrosion/irritation: Not classified. Prolonged contact may cause redness and irritation. Repeated exposure may cause skin dryness or cracking.
- Eye damage/irritation: Not classified. May cause slight irritation. May cause burning feeling and temporary redness.
- Respiratory/skin sensitisation: Not classified as a sensitiser.
- Germ cell mutagenicity: This product is not classified as mutagenic.
- Carcinogenicity: This product is not classified carcinogenic.
- Reproductive toxicity: Not classified.
- STOT (single exposure): Not classified. Vapours inhaled in strong concentration have a narcotic effect on the central nervous system. The inhalation of vapours or aerosols may be irritating for the respiratory tract and for mucous membranes.
- STOT (repeated exposure): Not classified.
- Aspiration toxicity: May be fatal if swallowed and enters airways. The fluid can enter the lungs and cause damage (chemical pneumonitis, potentially fatal).

Acute

Ingestion Acute toxicity (Oral):

- LD50, Rat: >5,000 mg/kg [Supplier's SDS].

Other Acute toxicity (Dermal):

- LD50, Rabbit: >2,000 mg/kg [Supplier's SDS].

Inhalation Acute toxicity (Inhalation):

- LC50, Rat: >5.2 mg/l (4 h) [Supplier's SDS].

**Carcinogen Category** None

#### 12. ECOLOGICAL INFORMATION

**Ecotoxicity** Aquatic toxicity:

- LC50, Crustacea (Dendronereides heteropoda): 4,720 mg/L (96 h) [Distillates (petroleum), hydro-treated light].

Persistence/Degradability Not readily biodegradable.

**Mobility** Given its physical and chemical characteristics, the product has no soil mobility. The product evaporates readily. The

product is insoluble and floats on water.

**Environmental Fate** Should not be released into the environment - Prevent entry into soils, drains and waterways.

Bioaccumulation Potential logPow: 3.3

Environmental Impact No Data Available

#### 13. DISPOSAL CONSIDERATIONS

**General Information** Dispose of in accordance with all applicable national environmental laws and regulations. Where possible, recycling is

preferred to disposal or incineration. If recycling is not practicable, dispose of at a licensed waste oil facility.

Special Precautions for Land Fill Contaminated packaging: Empty containers may contain flammable or explosive vapours. Empty containers should be

taken to an approved waste handling site for recycling or disposal.

# 14. TRANSPORT INFORMATION

### Land Transport (Australia)

ADG Code

Proper Shipping Name Solvent D60 (Distillates, petroleum, hydrotreated light)

Class C1 Combustible Liquids - Flash Point >60°C - <=93°C, Closed Cup

Subsidiary Risk(s) No Data Available

No Data Available

UN NumberNo Data AvailableHazchemNo Data AvailablePack GroupNo Data AvailableSpecial ProvisionNo Data Available

**Comments** NON-DANGEROUS GOODS: Not regulated for LAND transport.

Land Transport (Malaysia)

ADR Code

Proper Shipping Name Solvent D60 (Distillates, petroleum, hydrotreated light)

Class No Data Available
Subsidiary Risk(s) No Data Available

No Data Available

UN NumberNo Data AvailableHazchemNo Data AvailablePack GroupNo Data AvailableSpecial ProvisionNo Data Available

Comments NON-DANGEROUS GOODS: Not regulated for LAND transport.

# Land Transport (New Zealand)

NZS5433

Proper Shipping Name Solvent D60 (Distillates, petroleum, hydrotreated light)

Class No Data Available
Subsidiary Risk(s) No Data Available

No Data Available

UN Number No Data Available
Hazchem No Data Available
Pack Group No Data Available
Special Provision No Data Available

**Comments** NON-DANGEROUS GOODS: Not regulated for LAND transport.

# Land Transport (United States of America)

**US DOT** 

**Proper Shipping Name**Solvent D60 (Distillates, petroleum, hydrotreated light)

Class No Data Available
Subsidiary Risk(s) No Data Available

No Data Available

UN Number No Data Available
Hazchem No Data Available
Pack Group No Data Available
Special Provision No Data Available

**Comments** NON-DANGEROUS GOODS: Not regulated for LAND transport.

## **Sea Transport**

IMDG Code

**Proper Shipping Name** Solvent D60 (Distillates, petroleum, hydrotreated light)

Class No Data Available
Subsidiary Risk(s) No Data Available
UN Number No Data Available
Hazchem No Data Available
Pack Group No Data Available
Special Provision No Data Available
EMS No Data Available

Marine Pollutant No

**Comments** NON-DANGEROUS GOODS: Not regulated for SEA transport.

## **Air Transport**

IATA DGR

Proper Shipping Name Solvent D60 (Distillates, petroleum, hydrotreated light)

Class No Data Available
Subsidiary Risk(s) No Data Available
UN Number No Data Available
Hazchem No Data Available
Pack Group No Data Available
Special Provision No Data Available

Comments NON-DANGEROUS GOODS: Not regulated for AIR transport.

#### **National Transport Commission (Australia)**

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

**Dangerous Goods Classification**NOT Dangerous Goods according to the Criteria of the Australian Code for the Transport of Dangerous Goods

by Road & Rail (ADG Code)

#### 15. REGULATORY INFORMATION

General Information HYDROCARBONS, LIQUID

Poisons Schedule (Aust) Schedule 5

# **Environmental Protection Authority (New Zealand)**

Hazardous Substances and New Organisms Amendment Act 2015

Approval Code Solvents Combustible Group Standard 2020 HSR002649

# **National/Regional Inventories**

Australia (AIIC) Listed

Canada (DSL) Listed

Canada (NDSL) Not Determined

China (IECSC) Listed

**Europe (EINECS)** 265-149-8

Europe (REACh) Not Determined

Japan (ENCS/METI) Listed

Korea (KECI) Listed

Malaysia (EHS Register) Not Determined

New Zealand (NZIoC) Listed

Philippines (PICCS) Listed

Switzerland (Giftliste 1) Not Determined

Switzerland (Inventory of Notified Substances)

Not Determined

Taiwan (NCSR) Not Determined

USA (TSCA) Listed

# **16. OTHER INFORMATION**

Related Product Codes ALHYDR3370, DEMISP3250, DEMISP3301, DEMISP3302, DEMISP3303, DEMISP3304, DEMISP3420, DEMISP3421,

DEMISP3430, DEMISP3431, DEMISP3432, DEMISP3435, DEMISP3460, DEMISP3461, DEMISP3462, DEMISP3600, DEMISP4201, DEMISP4202, DEMISP4300, DEMISP4400, DEMISP5900, DEMISP6002, DEMISP6003, DEMISP6004, DEMISP6012, DEMISP6020, DEMISP6030, DEMISP6301, DEMISP6302, DEMISP

DEMISP6401, DEMISP6700

Revision 5

**AICS** Australian Inventory of Chemical Substances

atm Atmosphere

**CAS** Chemical Abstracts Service (Registry Number)

cm² Square CentimetresCO2 Carbon Dioxide

**COD** Chemical Oxygen Demand **deg C (°C)** Degrees Celcius

EPA (New Zealand) Environmental Protection Authority of New Zealand

deg F (°F) Degrees Farenheit

g Grams

g/cm³ Grams per Cubic Centimetre

g/I Grams per Litre

**HSNO** Hazardous Substance and New Organism **IDLH** Immediately Dangerous to Life and Health **immiscible** Liquids are insoluable in each other.

inHg Inch of Mercury inH2O Inch of Water

**K** Kelvin **kg** Kilogram

kg/m³ Kilograms per Cubic Metre

**Ib** Pound

**LC50** LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.

**LD50** LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.

Itr or L Litre m<sup>3</sup> Cubic Metre

mbar Millibar

mg Milligram

mg/24H Milligrams per 24 Hours mg/kg Milligrams per Kilogram mg/m³ Milligrams per Cubic Metre

Misc or Miscible Liquids form one homogeneous liquid phase regardless of the amount of either component present.

mm Millimetre

mmH2O Millimetres of Water mPa.s Millipascals per Second

N/A Not Applicable

NIOSH National Institute for Occupational Safety and Health NOHSC National Occupational Heath and Safety Commission

**OECD** Organisation for Economic Co-operation and Development

Oz Ounce

**PEL** Permissible Exposure Limit

Pa Pascal

ppb Parts per Billion
ppm Parts per Million

**ppm/2h** Parts per Million per 2 Hours **ppm/6h** Parts per Million per 6 Hours

psi Pounds per Square Inch

**R** Rankine

**RCP** Reciprocal Calculation Procedure

**STEL** Short Term Exposure Limit

**TLV** Threshold Limit Value

tne Tonne

TWA Time Weighted Average ug/24H Micrograms per 24 Hours UN United Nations wt Weight