

NOT CLASSIFIED AS HAZARDOUS ACCORDING TO THE CRITERIA OF WORKSAFE AUSTRALIA

1 Identification of the substance/preparation and company**1.1 Name of substance/preparation**

Commercial product name: DALCHEM SRT-30 CATALYST

1.2 Use of substance / preparation: Industrial.

Intermediate chemical

1.3 Company name**1.4 Distributor:**

Dalchem Pty Ltd

Street 1/6 Elma Road

State/postal code/city: Cheltenham Vic 3092

Telephone: +61 3 9553 7040

Fax: +61 3 9553 2407

1.5 Australian Emergency Telephone Number +61 3 9553 7040**2 Composition/information on ingredients****2.1 Chemical characterization (preparation):**

Chemical characteristics

Organotin compound + silicic acid ester + polydimethylsiloxane

3 Hazards identification**3.1 Classification:**

R-Phrase Description

R- -

4 First-aid measures**4.1 General information:**

Where there is a risk of unconsciousness place and transport on one side in a stable position.

4.2 After inhalation:

Move to fresh air, keep the victim laying down and restful. If breathing has stopped, give artificial respiration. Seek medical advice and clearly identify substance.

4.3 After contact with the skin:

Wipe off excess material with cloth or paper. Wash with plenty of water or soap and water; immediately remove all contaminated clothing. Seek medical advice and clearly identify substance.

4.4 After contact with the eyes:

Rinse immediately with plenty of water for 10-15 minutes and seek medical advice.

4.5 After swallowing:

Induce drinking plenty of water in small portions. Do not induce vomiting. Seek medical advice immediately and produce the label or packaging.

5 Fire-fighting measures**5.1 Suitable extinguishing media:**

water spray , water mist , extinguishing powder , sand , foam , carbon dioxide .

5.2 Extinguishing media which must not be used for safety reasons:

water jet .

5.3 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases:-**5.4 Special protective equipment for fire fighting:**

Use respiratory protection independent of recirculated air.



6 Accidental release measures

6.1 Personal precautions:

Wear personal protection equipment (see section 8). Avoid contact with eyes and skin. Do not inhale gases/vapours/aerosols. Ensure adequate ventilation.

6.2 Environmental precautions:

Prevent material from entering sewers or surface waters. Inform authorities if substance leaks into surface waters, sewerage or ground. Contain any fluid that runs out using suitable material (e.g. earth). Retain contaminated water/extinguishing water. Dispose of in prescribed marked containers.

6.3 Methods for cleaning up:

Do not flush away with water. Take up mechanically and dispose of according to local/state/federal regulations. Absorb with a liquid binding material such as diatomaceous earth and dispose of according to local/state/federal regulations. Contain larger amounts and pump up into suitable containers.

6.4 Further information:

Eliminate all sources of ignition.

7 Handling and storage

7.1 Handling

Precautions for safe handling:

Ensure adequate ventilation. Reseal opened containers carefully.

Precautions against fire and explosion:

Take precautionary measures against electrostatic charging. Keep away from open flames, heat and sparks. Cool endangered containers with water. In partly emptied containers formation of explosive mixtures is possible.

7.2 Storage

Conditions for storage rooms and vessels:

Protect against frost. Make sure there is no possibility of entering the ground.

Advice for storage of incompatible materials:

not applicable

Further information for storage:

Keep container tightly closed and store in a cool, well ventilated place. Store in a dry and cool place. Protect against moisture.

Minimum temperature allowed during storage and transportation: 0 °C

Maximum temperature allowed during storage and transportation: 30 °C

8 Exposure controls and personal protection equipment

8.1 Exposure limits

Maximum airborne concentrations at the workplace

CAS No. Material Type mg/m³ ppm Dust fract. Fibre/m³

71-23-8 1-Propanol TLV_{GB} 500,0 200,0

7440-31-5 Tin, Organic Compound (as

Sn)

Australian Exposure Standard

TWA 0.1 mg/m³ & STEL 0.2 mg/m³

Skin absorption hazard

8.2 Exposure limited and controlled

8.2.1 Exposure in the work place limited and controlled

General protection and hygiene measures:

Avoid contact with eyes and skin. Do not inhale gases/vapours/aerosols. Do not eat, drink or smoke when handling. Wash hands at the end of work and before eating.

Personal protection equipment

Respiratory protection:

In case of long or strong exposure: gas mask filter A .

Hand protection:

Protective gloves made of butyl rubber , nitrile rubber protective gloves . At any sign of decay or chemical permeability remove gloves immediately and replace. Gloves suitable for up to 60 minutes' use.

Eye protection:

protective goggles .

Skin protection:

protective clothing .

8.2.2 Exposure to the environment limited and controlled:

Observe local waste water bye-laws for organo tin and tin compounds. Prevent material from entering surface waters, drains or sewers and open soil.

9 Physical and chemical properties

9.1 General information

Physical state / form.....: liquid
Colour.....: colourless
Odour.....: slight

9.2 Important information about the protection of health, safety and the environment Method (67/548/EEC):

Boiling point / boiling range.....: 225 - 230 °C at 1013 hPa
Flash point.....: 70 °C (ISO 2719)
Ignition temperature: 250 °C (DIN 51794)
Lower explosion limit (LEL).....: not applicable
Upper explosion limit (UEL).....: not applicable
Vapour pressure.....: approx. 1 hPa at 20 °C
Density.....: approx. 1 g/cm³ at 20 °C (DIN 51757)
Water solubility / miscibility.....: virtually insoluble
pH-Value.....: not applicable
Viscosity (dynamic).....: approx. 10 mPa*s at 23 °C

9.3 Other information

Re 9.2 solubility in water: Hydrolytic decomposition occurs. Hydrolysis products reduce the flash point.
Thermal decomposition.....: not applicable

10 Stability and reactivity

10.0 General information:

If stored and handled in accordance with standard industrial practices no hazardous reactions are known.

10.1 Conditions to avoid:

moisture

10.2 Materials to avoid:

Reacts with: water , basic substances and acids . Reaction causes the formation of: alcohols .

10.3 Hazardous decomposition products:

If stored and handled in accordance with standard industrial practices and local regulations where applicable: none known . Under the effect of humidity, water and protic agents: alcohols .

11 Toxicological information

11.0 General information:

According to our present state of knowledge no damaging effect expected when treated in accordance with standard industrial practices and local regulations where applicable.

11.1 Toxicological tests

Acute toxicity (LD50/LC50-values relevant to classification):

Exposition Value/value range Species Source
oral > 20000 mg/kg rat (Limit Test) test report

Further information:

-

Reference points for mutagenic (carcinogenic) potential:

Test system Effect Source

Bacterial Reverse Mutation Test not mutagenic test report

12 Ecological information

12.1 Ecotoxicity

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Effects in sewage treatment plants (bacteria toxicity: respiration-/reproduction inhibition):

Do not introduce large amounts into purification plants.

12.2 Mobility

12.3 Persistence and degradability

Biodegradation / further information:

The hydrolysis product (propanol) is easily biologically degradable. Silicone content: Biologically not degradable. Polydimethylsiloxanes are degradable to a certain extent in abiotic processes.

Further information:

Polymer components: Elimination by adsorption in activated sludge. Contact with water liberates: propanol and silanol- and/or siloxanol-compounds .

12.4 Bio-accumulation potential

Further information:**12.5 Other harmful effects**

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12.6 Further ecological information**General information:**

Prevent material from entering surface waters, drains or sewers and open soil.

13 Disposal considerations**13.1 Material****Recommendation:**

Dispose of according to regulations by incineration in a special waste incinerator. Observe local/state/federal regulations.

13.2 Uncleaned packaging**Recommendation:**

Completely discharge containers (no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local/state/federal regulations. Uncleaned packaging should be treated with the same precautions as the material.

14 Transport information**14.1 Land transport GGVSE/ADR and RID****Road ADR:**

Valuation.....: Hazardous product
Class.....: 9
Packaging Group.....: III
Hazard No.: 90
UN no.: 3082
Proper Shipping Name.....: Dalchem SRT-30 Catalyst
Technical name.....: Dibutyl tin compound
Dalchem-Transport emergency
card.....:903

Railway RID:

Valuation.....: Hazardous product
Class.....: 9
Packaging Group.....: III
UN no.: 3082

14.2 Inland navigation**14.3 Transport by sea**

Valuation.....: Hazardous product
Class.....: 9
Packaging Group.....: III
UN no.: 3082
Proper Shipping Name.....: Environmentally hazardous substance, liquid, n.o.s.
Technical name.....: (Contains dibutyl tin compound)
Marine Pollutant.....: yes

14.4 Air transport ICAO-TI/IATA-DGR

Valuation.....: Hazardous product
Class.....: 9
Packaging Group.....: III
UN no.: 3082
Proper Shipping Name.....: Environmentally hazardous substance, liquid, n.o.s.
Technical name.....: (Contains dibutyl tin compound)

14.5 Transport/further information**Postal and courier service:**

German postal dispatch.....: 1000ccm per container / 3000ccm per package

15 Regulatory information**15.0 Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) Australia**

This is an S7 Scheduled Poison : YES

15.1 Warning Label (EU)**R-Phrase Description**

R- -

S-Phrase Description

S- -

15.2 National regulations:

SI 2002/1689: CHIP Regulations 2002

SI 2002/2677: COSHH Regulations 2002

SI 1999/3242: Management of Health & Safety at Work Regulations 1999

Health & Safety at Work Act 1974

SI 1993/1643: Environmental Protection Act 1993 & Subsidiary Regulations.

Other national and local measures relating to the workplace, pollution control, environmental protection and waste control.

16 Other information**16.1 Material**

The above information describes exclusively the safety requirements of the product(s) and is based on our present-day knowledge. It does not represent a guarantee for the properties of the product(s) described in terms of the legal warranty regulations. Properties of the product are to be found in the respective product leaflet.

16.2 Further information:

Commas appearing in numerical data denote a decimal point. Vertical lines in the left-hand margin indicate changes compared with the previous version.

**n.a. = not applicable n.s. = not subject to
Details of international registration status**

Listed on the following inventories:

HSNO

EINECS

IECSC

TSCA

PICCS

ENCS

ECL

AICS

End of MSDS Dalchem SRT-30 catalyst