

## Material Safety Data Sheet

Date Printed: 14/JUN/2005

Date Updated: 16/MAR/2004

Version 1.3

According to 91/155/EEC

Classified as Hazardous according to the criteria of EU Annex 1 and NOHSC.

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1 - Product and Company Information

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Product Name	2,4,6-TRICHLOROPHENOL, 98%
Product Number	T55301
Company	Sigma-Aldrich Pty. Ltd. 12 Anella Avenue Castle Hill NSW 2154 Australia
Technical Phone #	+61 2 9841 0555 (1800 800 097)
Fax	+61 2 9841 0500 (1800 800 096)
Emergency Phone #	+44 8701906777 (1800 448 465)

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2 - Composition/Information on Ingredients

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Product Name	CAS #	EC no	Annex I Index Number
2,4,6-TRICHLOROPHENOL	88-06-2	201-795-9	604-018-00-5

  

Formula	C6H3Cl3O
Molecular Weight	197.45 AMU
Synonyms	Dowcide 2S * Dowicide 2S * NCI-C02904 * OMAL * Phenachlor * RCRA waste number U231 * 2,4,6-Trichlorofenol (Czech) * 2,4,6-Trichlorophenol

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3 - Hazards Identification

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SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT  
Harmful if swallowed. Irritating to eyes and skin. Limited evidence of a carcinogenic effect. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
Carc. Cat.3

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4 - First Aid Measures

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## AFTER INHALATION

If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

## AFTER SKIN CONTACT

In case of contact, immediately wash skin with soap and copious amounts of water.

## AFTER EYE CONTACT

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

#### AFTER INGESTION

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

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### 5 - Fire Fighting Measures

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#### EXTINGUISHING MEDIA

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

#### SPECIAL RISKS

Specific Hazard(s): Emits toxic fumes under fire conditions.

#### SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

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### 6 - Accidental Release Measures

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PERSONAL PRECAUTION PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL  
Evacuate area.

#### PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves. Wear disposable coveralls and discard them after use.

#### METHODS FOR CLEANING UP

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

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### 7 - Handling and Storage

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#### HANDLING

Directions for Safe Handling: Do not breathe dust. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

#### STORAGE

Conditions of Storage: Keep tightly closed.

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### 8 - Exposure Controls / Personal Protection

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#### ENGINEERING CONTROLS

Use only in a chemical fume hood. Safety shower and eye bath.

#### GENERAL HYGIENE MEASURES

Wash contaminated clothing before reuse. Wash thoroughly after handling.

#### EXPOSURE LIMITS - DENMARK

Source	Type	Value
OEL	TWA	0.5 mg/m3

Remarks: HK

#### PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Government approved respirator in nonventilated areas and/or for exposure above the TLV or PEL.  
Hand Protection: Compatible chemical-resistant gloves.  
Eye Protection: Chemical safety goggles.

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## 9 - Physical and Chemical Properties

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Appearance	Physical State: Solid Color: Slightly brown Form: Solidified mass or fragments	
Property	Value	At Temperature or Pressure
pH	N/A	
BP/BP Range	246 °C	760 mmHg
MP/MP Range	65 °C	
Flash Point	N/A	
Flammability	N/A	
Autoignition Temp	N/A	
Oxidizing Properties	N/A	
Explosive Properties	N/A	
Explosion Limits	N/A	
Vapor Pressure	N/A	
SG/Density	N/A	
Partition Coefficient	N/A	
Viscosity	N/A	
Vapor Density	N/A	
Saturated Vapor Conc.	N/A	
Evaporation Rate	N/A	
Bulk Density	N/A	
Decomposition Temp.	N/A	
Solvent Content	N/A	
Water Content	N/A	
Surface Tension	N/A	
Conductivity	N/A	
Miscellaneous Data	N/A	
Solubility	N/A	

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## 10 - Stability and Reactivity

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### STABILITY

Stable: Stable.

Materials to Avoid: Strong oxidizing agents.

### HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.

### HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

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## 11 - Toxicological Information

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RTECS NUMBER: SN1575000

### ACUTE TOXICITY

LD50

Oral

Rat

820 mg/kg

LD50

Intraperitoneal

Rat

276 MG/KG

Remarks: Behavioral:Tremor. Behavioral:Convulsions or effect on seizure threshold. Nutritional and Gross Metabolic:Changes

in:Body temperature increase.

LD50  
Oral  
Guinea pig  
1000 mg/kg

LD50  
Oral  
Mammal  
454 mg/kg

LD50  
Skin  
Mammal  
700 mg/kg

#### IRRITATION DATA

Skin  
Rabbit  
20 mg  
24H  
Remarks: Moderate irritation effect

Eyes  
Rabbit  
0.25 mg  
24H  
Remarks: Severe irritation effect

#### SIGNS AND SYMPTOMS OF EXPOSURE

Depending on the intensity and duration of exposure, effects may vary from mild irritation to severe destruction of tissue.  
Damage to the eyes.

#### ROUTE OF EXPOSURE

Skin Contact: Causes skin irritation.  
Eye Contact: Causes eye irritation.  
Inhalation: Material is irritating to mucous membranes and upper respiratory tract.  
Multiple Routes: Harmful if swallowed, inhaled, or absorbed through skin.

#### TARGET ORGAN INFORMATION

Nerves. Blood. Liver. Damage to the eyes.

#### CHRONIC EXPOSURE - CARCINOGEN

Result: Carcinogen. This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

Rat  
Route of Application: Oral  
Exposure Time: 2Y  
Result: Tumorigenic: Carcinogenic by RTECS criteria.  
Blood: Leukemia Blood: Lymphomas including Hodgkin's disease.

Mouse  
Route of Application: Oral  
Exposure Time: 2Y  
Result: Tumorigenic: Carcinogenic by RTECS criteria. Liver: Tumors.

Mouse  
Route of Application: Oral  
Exposure Time: 2Y  
Result: Tumorigenic: Carcinogenic by RTECS criteria. Liver: Tumors.

Rat  
Route of Application: Oral  
Exposure Time: 2Y  
Result: Tumorigenic: Carcinogenic by RTECS criteria.  
Blood: Leukemia Blood: Lymphomas including Hodgkin's disease.

#### CHRONIC EXPOSURE - MUTAGEN

Mouse  
50 MG/KG  
Intraperitoneal  
specific locus test

Mouse  
80 MG/L  
Cell Type: lymphocyte  
Mutation in mammalian somatic cells.

Hamster  
30 MG/L  
Cell Type: lung  
Micronucleus test

Hamster  
100 MG/L  
Cell Type: lung  
Other mutation test systems

Hamster  
400 MG/L  
Cell Type: ovary  
Cytogenetic analysis

Hamster  
500 MG/L  
Cell Type: lung  
Cytogenetic analysis

Hamster  
30 MG/L  
Cell Type: lung  
SLN

Hamster  
20 MG/L  
Cell Type: lung  
Mutation in mammalian somatic cells.

#### CHRONIC EXPOSURE - REPRODUCTIVE HAZARD

Species: Rat  
Dose: 12500 MG/KG  
Route of Application: Oral  
Exposure Time: (2W PRE/1-21D PREG)  
Result: Effects on Newborn: Growth statistics (e.g., reduced weight gain).

12 - Ecological Information

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No data available.

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13 - Disposal Considerations

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SUBSTANCE DISPOSAL

Contact a licensed professional waste disposal service to dispose of this material. Observe all federal, state, and local environmental regulations.

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14 - Transport Information

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RID/ADR

UN#: 2020

Class: 6.1

PG: III

Proper Shipping Name: Chlorophenols, solid

IMDG

UN#: 2020

Class: 6.1

PG: III

Proper Shipping Name: Chlorophenols, solid

Marine Pollutant: No

Severe Marine Pollutant: No

IATA

UN#: 2020

Class: 6.1

PG: III

Proper Shipping Name: Chlorophenols, solid

Inhalation Packing Group I: No

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15 - Regulatory Information

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CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES

ANNEX I INDEX NUMBER: 604-018-00-5

INDICATION OF DANGER: Xn N

Harmful. Dangerous for the environment.

R-PHRASES: 22 36/38 40 50/53

Harmful if swallowed. Irritating to eyes and skin. Limited evidence of a carcinogenic effect. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-PHRASES: 36/37 60 61

Wear suitable protective clothing and gloves. This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Refer to special instructions/safety data sheets.

SWITZERLAND

SWISS POISON CLASS: 4

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16 - Other Information

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WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our

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