

# Safety Data Sheet (SDS) Chlorthal-Dimethyl 750

According to UN GHS 8th Ed  
Revision Date: 02/07/2022

First print date: 01/06/2018  
Version: 1.1

## SECTION 1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY/UNDERTAKING

**Product identifier:**

**Identification as on the label/Trade name:** Chlorthal- Dimethyl 750

**Common name:** Chlorthal-dimethyl 750 g/kg WP

**Relevant identification uses of the substance and uses advised against:**

**Identified uses:** Herbicide

**Uses advised against:** Use only as directed.

**Details of the supplier of the Safety Data Sheet:**

Enviro Bio-Chem (Pty) Ltd, 44 Kerk Street,  
Lichtenburg, North West, South Africa, 2740

**Details of the Registration Holder:**

Erintrade t/a RT Chemicals, 44 Kerk Street,  
Lichtenburg, North West, South Africa, 2740

**Contact Details:**

Telephone: +27 87 231 7261

Fax: 086 541 7948

Website: www.envirobiochem.co.za

**Emergency telephone numbers:**

**24 Hour Emergency Number: Bateleur: +27 83 123 3911**

Griffon Poison Information Centre: +27 82 446 8946

Poisons Information Helpline: 0861 555 777

Tygerberg Hospital: +27 21 931 6129

## SECTION 2. HAZARD IDENTIFICATION

**Classification of the substances or mixture**

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

**Label elements**

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

**Other hazards:**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

**Substance/Mixture:** Mixture

**Ingredients:**

Substance name (IUPAC)	CAS Number.	Concentration % by weight	Classification EC1272/2008
Chlorthal-Dimethyl	1861-32-1	78.1%	Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

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## SECTION 4. FIRST AID MEASURES

### Description of first aid measures:

**In case of inhalation:** Avoid breathing dust. Move to fresh air. Treat symptomatically and supportively as and when required. Seek medical attention if required.

**In case of skin contact:** In case of contact, wash off immediately with soap and plenty of water. Take off contaminated clothing and wash before reuse. Get medical attention if irritation develops and persists.

**In case of eye contact:** Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Consult a physician.

**In case of ingestion:** : Rinse mouth. Get medical attention if symptoms occur. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do NOT induce vomiting . Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt, or waistband. Consult a physician.

### Most important symptoms and effects, both acute and delayed:

**Anticipated acute effects:** None known.

**Anticipated delayed effects:** None known.

**Most important symptoms / effects:** Symptoms include eye irritation in case of eye contact, an upset stomach in case of ingestion and lung irritation or breathing difficulties when inhaled.

### Indication of any immediate medical attention and special treatment needed:

Treat symptomatically and supportively.

## SECTION 5. FIRE FIGHTING MEASURES

### Extinguisher media:

**Suitable** extinguisher media: Foam. Dry powder. Carbon dioxide. Water spray.

**Small Fire:** Extinguish small fires with carbon dioxide, dry powder, or alcohol-resistant foam.

**Large Fire:** Water spray can be used for larger fires or cooling of unaffected stock but avoid the accumulation of polluted run-off from the site.

**Unsuitable** extinguishing media: Do not use high volume water jet, due to contamination risk.

### Special hazards arising from the mixture:

Fire Hazard: Flammable liquid and vapour.

Hazardous decomposition products in case of fire: Refer to Section 10: Stability and Reactivity.

### Advice for fire-fighters:

Remove spectators from surrounding area. Isolate the fire area. Remain upwind of fire. Avoid inhaling vapours and fumes. Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Use an approved/certified respirator or equivalent. Water can be used to cool unaffected containers.

Contain fire control agents for later disposal according to Section 13.

## SECTION 6. ACCIDENTAL RELEASE

### Personal precautions, protective equipment, and emergency procedures:

**Personal precautions:** Do not breathe in spray mist or dust. Avoid contact with eyes.

**Protective equipment:** Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear. Use an approved/certified respirator or equivalent. Refer to section 8 for recommended personal protective equipment.

**Emergency procedures:** Alert emergency personnel. Evacuate spectators, animals and unprotected personnel..

### Environmental precautions:

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Stop leak if without risk. Prevent entry into drains, watercourses, or confined areas; dike if needed.  
If the product contaminates public water, inform appropriate authorities immediately in accordance with local regulations.  
Dispose in a safe manner in accordance with local/national regulations.

**Methods for containment and cleaning up:**

**For small spills :**

Contain spilled material if possible. Cover spill with materials such as: lime, damp sand, vermiculite, or diatomaceous earth. Collect in suitable container and label with contents for disposal.

**For large spills :** Prevent entry into drains, watercourses, or confined areas.

Contain and collect spillage with a suitable, damp absorbent material e.g. sand, earth, vermiculite or diatomaceous earth.

Do not create a powder cloud by using a brush or compressed air.

Sweep up and collect in a suitable container and label with contents for disposal according to local regulations.

Do not place spilled material back in original container. Do not re-use spill material.

To decontaminate the spill area, tools and equipment, wash with water and suitable detergent.

**Reference to other sections:**

See section 7 for information on safe handling.

See section 8 for information on personal protection equipment.

See section 13 for information on disposal.

**SECTION 7. HANDLING AND STORAGE**

**Precautions for safe handling:**

Avoid contact with eyes. Do not handle broken packages without protective equipment. Immediately clean up spills that occur during handling. Keep containers closed when not in use.

**Protective measures:** Observe directions on label and instructions for use.

**Advice on general occupational hygiene:** Practice good hygiene when using this material. Wash hands before eating, drinking, chewing gum, smoking, using the toilet or applying cosmetics. Worker should shower at the end of each workday. Wash all clothing before it is re-used.

**Conditions for safe storage:**

Store in the original container in a cool, dry, ventilated, locked place out of direct sunlight and out of the reach of children and animals. Store away from food, feed, drink, and tobacco products. Store where streams and underground water cannot be accidentally contaminated. Store away from incompatible products. Keep the container closed when not in use.

**Incompatible substances and mixtures:** Refer to product label.

**Specific end uses:** Use as directed. Use original container.

**SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Permissible concentration:**

Acceptable Daily Intake (ADI): 0.5 mg/kg/day (1988 US EPA).

**Occupational Exposure Limits:**

Hazardous Components	% m/m	Hazard	Permissible Exposure Limits * PEL (TWA) OSHA (USA)	Threshold Limit Value *TLV (TWA) INSHT

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Chlorthal-dimethyl	75	Eye and lung irritation;possible carcinogen	None adopted	None adopted
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**Exposure control:**

**Appropriate engineering controls:** It is essential to provide adequate ventilation. Provide local exhaust ventilation or other suitable engineering controls to maintain airborne concentrations below OELs or other specified exposure limits. Ensure that eye wash stations and safety showers are proximal to the work-station location. Comply with occupational safety, environmental, fire and other applicable regulations.

**Hygiene measures:** Wash hands, forearms, and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Personal Protective Equipment:**

**Eye/face protection:** Avoid contact with eyes. The use of safety glasses with side shields (or goggles) are recommended

**Hand protection:** Use chemical resistant gloves. Examples of preferred glove barrier materials include Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, Polyvinyl alcohol, Polyvinyl chloride.

**Body protection:** Full body covering, shoes and socks. Appropriate impervious clothing is required to prevent skin contact with the product.

**Respiratory protection:** For most well-ventilated conditions, no respiratory protection is required. When workers are facing concentrations above the exposure limit, they must use an approved positive pressure self-contained breathing apparatus

**Environmental exposure controls:** Prevent product from entry into sewers and water courses

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**
**Information on basic physical and chemical properties**

Appearance	Powder
Colour	Yellowish brown
Odour	No data available
Odour threshold	No data available
pH	Not applicable
Melting point / freezing point (°C)	153 – 154.5
Boiling point (°C)	Decomposes without boiling.
Flash point (°C)	Non flammable
Evaporation rate	No data available
Flammability	Non-flammable. Chlorthal-dimethyl will decompose in
Upper /lower flammability limits	No data available
Vapour pressure 20°C	No data available
Vapour density	No data available
Relative density (25°C)	No data available
Water solubility (g/l) at 20°C	Disperses in water
Partition coefficient : n-octanol/water	(n-octanol/water) log Kow = 4.28 at 25 °C.
Auto-ignition temperature (°C)	Will not auto-ignite under normal storage conditions
Decomposition temperature (°C)	No data available
Viscosity, dynamic (mPa s)	No data available
Explosive properties	Nonexplosive
Oxidising properties	None

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Explosive limits	No data available
Corrosive Properties	None
Hydrolysis	Virtually no degradation in water ranging from moderately acidic to moderately alkaline (pH 5.0 to pH 9.0). Hydrolyses in strong acidic or alkaline media

**SECTION 10. STABILITY AND REACTIVITY**
**Reactivity:**

No data available.

**Chemical stability:**

Stable for up to 2 years under normal warehouse and field conditions. None of the components contain reactive functional groups and the active ingredient, chlorthal-dimethyl, will only react at an appreciable rate under extreme conditions of pH when the ester functions will be hydrolysed.

**Possibility of hazardous reactions:**

No information available.

**Conditions to avoid:**

Avoid direct sunlight, sources of heat. The product will decompose at elevated temperatures (360 – 370 °C).

**Incompatible materials:**

Store away from strong oxidising agents. Store separate from and prevent contact with alkalis and acids which will destroy the product.

**Hazardous decomposition products:**

 Hazardous fumes of hydrogen chloride (HCL), carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>) and unidentified organic compounds may be emitted when the product is heated excessively or burned.

**SECTION 11. TOXICOLOGICAL INFORMATION**
**Toxicokinetics, metabolism and distribution:** No data available

**Information on toxicological effects:**
**Assessment of acute toxicity:**

No toxicological information is available on this product. The toxicity data below are based on the published properties for Chlorthal-dimethyl, amorphous silica and the lignosulfonate dispersants/surfactants. While the toxicological concern for Chlorthal- dimethyl per se may be low, the technical product may contain very small amounts of dioxin (2,3,7,8-TCDD) and hexachlorobenzene (HCB) as impurities, which are of toxicological concern. However, available analytical data indicate that the product contains < 0.01% HCB.

Chlorthal-Dimethyl CAS No. 1861-32-1	
<b>Acute toxicity:</b>	
Acute Oral LD50 (rat)	>10000 mg/kg
Acute Dermal LD50 (rat):	>2000 mg/kg
Acute Inhalation LC50 - 4 h (rat)	>4.5 mg/l
Respiratory or skin sensitization (Guinea pig)	Not a skin sensitiser
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic
Carcinogenicity	A micro-contaminant in Chlorthal-Dimethyl 750, Hexachlorobenzene (HCB), has been found to be carcinogenic in several studies conducted for IARC and NTP. Chlorthal-Dimethyl has been classified by EPA as a Group C, possible human carcinogen.

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Reproductive toxicity	None known
Specific Target Organ Toxicity STOT single exposure	None known
Specific Target Organ Toxicity STOT repeated exposure	None known
Aspiration hazard	None known

Additional information:

Inhalation: Prolonged inhalation may be harmful.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## SECTION 12. ECOLOGICAL INFORMATION

<b>Chlorthal-Dimethyl CAS No. 1861-32-1</b>	
<b>Toxicity</b>	
Birds Acute oral LD50 Dietary LC50 (5d)	>2250 mg/kg Bobwhite quail >5620 mg/kg Bobwhite quail and mallard ducks
Aquatic Toxicity Fish LC <sub>50</sub> (96 hr) Aquatic Toxicity Daphnia EC <sub>50</sub> (48 hr) Toxicity to algae – static test E <sub>r</sub> C <sub>50</sub> (5d hr) Toxicity to bacteria static test EC <sub>50</sub> (0.5h)	>4.7 mg/l Rainbow trout; >5.4 mg/l bluegill sunfish >4.6 mg/l Daphnia magna (Water flea) No data available No data available
<b>Persistence and degradability</b>	
Biodegradability	Not applicable
<b>Bioaccumulation potential</b>	No data available
<b>Mobility in Soil</b>	No data available
<b>Result of PBT and vPvB assessment</b>	No data available
<b>Other adverse effects</b>	Toxic to aquatic life

## SECTION 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods:

#### Product:

Keep out of drains, sewers, ditches, and waterways. Refer to container label for disposal information. Treat as hazardous waste and dispose of in accordance with local/ regional/ national/ international regulations.

#### Container:

Refer to container label for disposal information. Triple or pressure rinse empty containers. Pour rinse water into spray tank. Dispose of as hazardous waste. Do not contaminate water when disposing of rinse water. Dispose of using an approved waste disposal service provider. Follow all local/ regional/ national/ international regulations.

## SECTION 14. TRANSPORT INFORMATION

UN Number	Not regulated
UN proper shipping name	Not regulated
Transport hazard class	Not regulated
Packaging group	Not regulated
Marine pollutant	Not applicable

## SECTION 15. REGULATORY INFORMATION

Safety, health, and environmental regulations/legislation for the mixture:

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**Relevant information regarding authorization:** Occupational Health and Safety Act 1993. Regulation for Hazardous Chemical Agents, 2021. UN Recommendations on the Transport of Dangerous Goods Model Regulations Rev. 21 (2019), Globally Harmonized System of Classification and Labelling of Chemicals (GHS) Rev 8, 2019.

**Relevant information regarding restrictions:**

**EU regulations:** Regulation EC 1272/2008 [EU-GHS/CLP]

**Other National regulations:**

National Road Traffic Act, 1996 (ACT NO. 93 of 1996).

SANS 10228:2012- The identification and classification of dangerous goods for transport by road and rail modes.

National Environmental Management Waste Act 59 of 2008.

Act 36 of 1947 of the Republic of South Africa. This product is registered under it is a violation of South African law to use this product in any manner inconsistent with its approved labelling. Read and follow all label directions

**Chemical Safety Assessment carried out?** No

### SECTION 16. OTHER INFORMATION

**Indication of changes:**

Classification according to SANS 10234:2019, Regulation EC 1272/2008 [EU-GHS/CLP]  
GHS aligned – all sections

**Relevant H statements (number and full text):**

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

**Training instructions:**

Use as indicated on the label, special training may be required for application.

**Further information:**

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

The information on this sheet is not a specification; it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product, nor where instructions or recommendations are not followed.