

MATERIAL SAFETY DATA SHEET

CHLOROTHALONIL 90% WG

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY

SUPPLIER NAME:	Shandong Weifang Rainbow Chemical Co., Ltd.
SUPPLIER ADDRESS:	South Ligang Town, Jiangyin City, Jiangsu Province, P.R.China
SUPPLIER PHONE	86-531-88875230, 88875231
SUPPLIER FAX	86-531-88875232, 88875224
CHEMICAL NAME	Tetrachloroisophthalonitrile
CAS NUMBER	1897-45-6
MOLECULAR FORMULA	C ₈ Cl ₄ N ₂
MOLECULAR WEIGHT	265.9
CHEMICAL FAMILY	Chloronitrile
USE	Fungicide

2. COMPOSITION / INFORMATION ON INGREDIENTS

CHLOROTHALONIL	90%
OTHER INGREDIENTS	Up to balance

3. HAZARDS IDENTIFICATION

SYMPTOMS OF ACUTE EXPOSURE	No skin irritation. May cause eye irritation and contact dermatitis. No allergic skin reactions.
HAZARDOUS DECOMPOSITION	Can decompose at high temperatures forming toxic gases.
PRODUCTS	
UNUSUAL FIRE, EXPLOSION AND REACTIVITY HAZARDS	During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

4. FIRST - AID MEASURES

SKIN	Remove contaminated clothes. Rinse and then wash skin with plenty of water immediately.
EYES	Rinse with plenty of water for several minutes (remove contact lenses if easily possible) immediately.
INGESTION	If swallowed induce vomiting by tickling the back of throat. Be quiet and call a physician.
Notes To Physician	No specific antidote if ingested. Treat symptomatically.

5. FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA:	Water spray, foam, carbon dioxide or dry powder.
XTINGUISHING MEDIA WHICH MUST NOT BE USED FOR SAFETY REASONS:	None known.
SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTING:	Wear protective clothing and self contained breathing apparatus.
SPECIAL EXPOSURE HAZARDS:	Fumes released may contain toxic and/or irritating e.g. hydrogen chloride.
OTHER INFORMATION:	Intact containers should be removed from risk of exposure to the fire if it is safe to do so. If it is not safe to remove them, spray intact containers with water to keep them cool. Contain fire-fighting water with sand or some such bunding material.

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6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONARY MEASURES:

Refer to section 8 below for personal protection required.

ENVIRONMENTAL-PROTECTION MEASURES:

Keep the area isolated and do not allow contamination to enter the sewerage system.

If the product has entered the sewerage system or contaminated a public place advise the appropriate authority.

PROCEDURES FOR CLEANING/ABSORPTION:

Contain/absorb the spillage with a suitable inert absorbent material or sand which should then be transferred to secure containers and sent for disposal.

7. HANDLING AND STORAGE

HANDLING Handle the pesticide with gloves and wash the hand after handling. Do not apply to humans, their clothing, or bedding. Do not contaminate food or use on household tanks.

STORAGE Store at normal temperatures, away from children, domestic animals, food and feed products, seed and fertilizer. Do not contaminate other stored products or the storage area by handling or storage of this product. Keep in a well-ventilated room.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY PROTECTION	Approved respirator
PROTECTIVE GLOVES	Rubber gloves
EYE PROTECTION	Safety goggles or face shield.
INDUSTRIAL HYGIENE	Adequate ventilation.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	White granules
ODOUR	Characteristic odour
RELATIVE DENSITY (at 20°C)	0.7231
FLAMMABILITY:	No inflammable.
ACIDITY / ALKALINTY:	Not applicable.
EXPLOSIVITY:	Non-explosive.

10. STABILITY AND REACTIVITY

STABILITY	Thermally stable at ambient temperatures. Stable to U.V. light in aqueous media and in crystalline state. Stable in acidic and moderately alkaline aqueous solution; slow hydrolysis at pH>9.
INCOMPATIBILITY:	(MATERIALS TO AVOID) Incompatible with oils
HAZARDOUS REACTION	The substance decomposes on heating and on burning producing toxic and corrosive fumes including hydrogen chloride and nitrogen oxides.

11. TOXICOLOGICAL INFORMATION

ACUTE ORAL LD ₅₀	>5000 mg/kg (female rats)
ACUTE DERMAL LD ₅₀	>5000 mg/kg (male and female rats)
ACUTE INHALATION LC ₅₀ (4 hours)	>0.15 mg/L (rats)

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CONTACT WITH THE SKIN	Non irritation(rabbits)
CONTACT WITH THE EYES	Mild irritation (rabbits)
SKIN SENSITIZATION	Non sensitization(rabbits)
MUTAGENIC EFFECTS	No mutagenic activity

12. ECOLOGICAL INFORMATION

EFFECTS ON BIRDS	Chlorothalonil is practically nontoxic to birds. The LD50 in mallard ducks is more than 5000 mg/kg. Most avian wildlife are not significantly affected by this compound.
EFFECTS ON AQUATIC ORGANISMS	Chlorothalonil and its metabolites are highly toxic to fish, aquatic invertebrates, and marine organisms. Fish, such as rainbow trout, bluegill, and channel catfish are noticeably affected even when chlorothalonil levels are low (less than 1 mg/L). The LC50 is 0.50 mg/L in rainbow trout, 0.60 mg/L in bluegills, and 0.72 mg/L in channel catfish. Chlorothalonil does not store in fatty tissues and is rapidly excreted from the body. Its bioaccumulation factor is quite low.
EFFECTS ON OTHER ORGANISMS	The compound is nontoxic to bees.

13. DISPOSAL CONSIDERATIONS

Disposal must be in accordance with applicable local regulations. Remove nonusable solid materials and/or contaminated soil for disposal in an approved and permitted landfill. Do not flush into surface water or sanitary sewer systems.

SPILLAGE DISPOSAL	Do not wash away into sewer. Do not let this chemical enter the environment. Sweep spilled substance into containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place.
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14. TRANSPORT INFORMATION

Do not transport with food and feed stuff; Marine pollutant.

CLASS: 6.1
UN NO.: 2761

15. REGULATORY INFORMATION

Not Available.

16. OTHER INFORMATION

The data given here is based on current knowledge and experience. The purpose of this safety data sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.