




PRODUCT SPECIFICATION

NAME OF PRODUCT	:	CHLORANIL (Hydroquinone Base)
CHEMICAL NAME	:	2,3,5,6 Tetrachloro 1,4-Benzoquinone
CAS NO.	:	[118-75-2]
MOLECULAR FORMULA	:	C ₆ Cl ₄ O ₂
STRUCTURAL FORLMULA	:	
PHYSICAL APPEARANCE	:	Yellow Crystel Powder
MOLECULAE WEIGHT	:	245.89
MELTING POINT	:	290 ⁰ C Mini.
PURITY	:	99.0% Mini. (By-HPLC)
RESIDUE ON SUBLIM	:	0.15% Max.
PACKING	:	50 Kgs, HDPE Bags/ Drum with Liner

For Meg Pie Chemicals



MEGPIE CHEMICALS

MATERIAL SAFETY DATA SHEET

Product: CHLORANIL
Company: Megpie Chemicals
9, Zill Ind. Estate
Vill. Veraval (Shaper)
Dist Rajkot (Guj.)
India- 360 002
Telephone 91 2827 252844
Fax 91 2827 252534

SECTION 1. CHEMICALS IDENTIFICATION

Product Name: Chloranil
CAS # 118-75-2
EC NO. 204-274-4
UN#: 2587

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

Formula C6Cl4O2
Molecular Weight 245.88 AMU
Synonyms 1,4-Benzoquinone, 2,3,5,6-tetrachloro- *
Chloranil * Dow Seed Disinfectant No. 5 * ENT
3,797 * G-25804 * G-444E * Geigy-444E
Tetrachloro benzoquinone *
Tetrachloro-p-benzoquinone *
Tetrachloro-1,4-benzoquinone *
2,3,5,6-Tetrachloro-p-benzoquinone *
2,3,5,6-Tetrachloro-1,4-benzoquinone *
2,3,5,6-Tetrachloro-2,5-cyclohexadiene-1,4-dione
Tetrachloroquinone * Tetrachloro-p-quinone *

SECTION 3. HAZARDS INFORMATION

TABLE PRECAUTION STATEMENT

IRRITANT
IRRITANT TO EYES, RESPIRATORY SYSTEM AND SKIN.
TARGET ORGAN(S):
LIVER
IN CASE OF CONTACT WITH EYES RINSE IMMEDIATELY WITH PLENTY OF
WATER AND SEEK MEDICAL ADVICE
WEAR SUITABLE PROTECTIVE CLOTHING

SECTION 4. FIRST-AID MEASURES

IN CASE OF CONTACT IMMEDIATE FLUSH EYES WITH COPIOUS AMOUNT OF
WATER FOR AT LEAST 15 MINUTES.
IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS
AMOUNT OF WATER. IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE
ARTIFICIAL
RESPIRATION. IF BREATHING IS DIFFICULT GIVE OXYGEN.
IF SWALLOWED, WASH MOUTH WITH WATER PROVIDE PERSON IS CONSCIOUS.
CALL A PHYSICIAN. WASH CONTAMINATED CLOTHING BEFORE REUSE.



SECTION 5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

WATER SPRAY

CARBON DIOXIDE, DRY CHEMICALS POWDER OR APPROPRIATE FORM.

SPECIAL FIRE FIGHTING PROCEDURE

WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES.

UNUSUAL FIRE AND EXPLOSION HAZARDS

EMITS TOXIC FUMES UNDER MATERIALS IN POWDER FORM, IS CAPABLE OF CREATING A DUST EXPLOSION.

SECTION 6. ACCIDENTAL RELEASE MEASURES

WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY RUBBER GLOVES.

SWEEP UP, PLACE IN A BAG AND HOLD FOR WASTE DISPOSAL.

AVOID RAISING DUST

VENTILATING AREA AND WASH SPILL SITE MATERIAL PICKUP IS COMPLETE

SECTION 7. HANDLING AND STORAGE

HANDLING

Directions for Safe Handling: Avoid inhalation. Do not get in eyes, on skin, on clothing.

STORAGE

Conditions of Storage: Keep tightly closed. Store in a cool dry Place

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS

Safety shower and eye bath.

GENERAL HYGIENE MEASURES

Wash thoroughly after handling. Wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT

Hand Protection: Rubber gloves.

Eye Protection: Chemical safety goggles.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Color:

Deep yellow TO GREEN POWDER

Form: Fine crystals

Property Value At Temperature or Pressure

pH N/A

BP/BP Range N/A

MP/MP Range **295 °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

SECTION 10. STABILITY AND REACTIVITY

INCOPATINILITES
STRONG OXIDIZING AGENT
Strong base
Store away from heat and direct sunlight
Hazardous combustion or decomposition products
Toxic fumes of:
Carbon monoxide, carbon dioxide
Hydrogen chloride gas

SECTION 11. TOXICOLOGICAL INFORMATION

RTECS NUMBER: DK6825000
ACUTE TOXICITY
LD50 Oral Rat 4000 mg/kg
LC50 Inhalation Rat 2,485 mg/m3/4H
Remarks: Behavioral: Somnolence (general depressed activity).
Lungs, Thorax, or Respiration: Structural or functional change in
trachea or bronchi. Nutritional and Gross Metabolic: Weight loss
or decreased weight gain.
LD50 Intraperitoneal Rat 500 MG/KG
SIGNS AND SYMPTOMS OF EXPOSURE
To the best of our knowledge, the chemical, physical, and
toxicological properties have not been thoroughly investigated.
ROUTE OF EXPOSURE
Inhalation: Material is irritating to mucous membranes and upper
respiratory tract.
Multiple Routes: May be harmful by inhalation, ingestion, or
skin absorption. Causes eye and skin irritation.
TARGET ORGAN INFORMATION
Liver.
CHRONIC EXPOSURE - CARCINOGEN
Mouse Route of Application: Oral
Exposure Time: 78W
Result: Tumorigenic: Neoplastic by RTECS criteria. Liver: Tumors

SECTION 12. ECOLOGICAL INFORMATION

DATA NOT YET AVAILABLE

SECTION 13. DISPOSAL CONSIDERATIONS

DISSOLVE OR MIX THE MATERIALS WITH A COMBUSTIBLE SOLVENT AND BURN
IN A CHEMICAL INCINERATION WITH AN AFTER BURNS AND SCRUBBER.
OBSERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENT REGULATIONS.



SECTION 14. TRANSPORT INFORMATION

RID/ADR
UN#: 3077
Class: 9 PG: III
Proper Shipping Name: Environmentally hazardous
substance, solid, n.o.s
IMDG UN#: 3077
Class: 9 PG: III
Proper Shipping Name: Environmentally hazardous
substance, solid, n.o.s
Marine Pollutant: No
Severe Marine Pollutant: Yes
Technical Name: Required
IATA UN#: 3077
Class: 9 PG: III
Proper Shipping Name: Environmentally hazardous
substance, solid, n.o.s
Inhalation Packing Group I: No
Technical Name: Required

SECTION 15. REGULATORY INFORMATION

CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES
ANNEX I INDEX NUMBER: 602-066-00-1
INDICATION OF DANGER: Xi N
Irritant. Dangerous for the environment.
R-PHRASES: 36/38 50/53
Irritating to eyes and skin. 50/53 Very toxic to aquatic organisms,
may cause long-term adverse effects in the aquatic environment.
S-PHRASES: 37 60 61
Wear suitable 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.
COUNTRY SPECIFIC INFORMATION
Germany WGK: 2 SWITZERLAND SWISS POISON CLASS: 4

SECTION 16. OTHER INFORMATION

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 knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product.

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