



## Material Safety Data Sheet (MSDS)

### 1. Identification of the substance/preparation and of the company/undertaking

**Product name:** Halquinol

**Manufacturer/Supplier:** HAIHANG INDUSTRY CO., LTD.

**Address:**

7/F, SANQING FENGRUN BUILDING, No.100 SOUTH GONGYE ROAD, JINAN CITY,  
SHANDONG PROVINCE, CHINA.

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**Further information obtainable from:** HAIHANG INDUSTRY CO., LTD.

**Recommended use of the chemical and restrictions on use:** Medical Intermediate. Restrictions on use: Do NOT use it in an application which may contaminate food or do harm to human health.

### Emergency overview:

White solid (flake), Phenolic odor. It may release smoke, nitrogen oxides, carbon monoxide, carbon dioxide, nitrogen, and other hazardous gas from thermal decomposition. Harmful if swallowed. Causes mild skin irritation. Causes eye irritation.

### GHS hazard classification per GB 30000. 2-2013 ~ GB 30000. 29-2013:

Physical hazards: Not classified

Health hazards: Acute toxicity (oral) - Category 4.

Skin corrosion/irritation - Category 3.

Serious eye damage/eye irritation - Category 2B.

Environmental hazards: Not classified

### Label elements

**Symbol:**



**Signal word:** Warning.

### Hazard Statement:

H302: Harmful if swallowed.

H316: Causes mild skin irritation.

H320: Causes eye irritation.

### Prevention Precautionary Statements:

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

### Response Precautionary Statements:

P332 + P313: If skin irritation occurs: Get medical advice/attention.



P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313: If eye irritation persists: Get medical advice/attention.

P301 + P312: IF SWALLOWED: Call a POISON CENTER/doctor, if you feel unwell.

P330: Rinse mouth.

**Storage precautionary statements:**

No special requirement.

**Disposal precautionary statements:**

P501: The waste should be transported to an authorized waste disposal company, and must be disposed of according to "Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste". It is recommended to use incineration method to dispose of waste.

**Physical and chemical hazards:** White solid (flake), Phenolic odor. It may release smoke, nitrogen oxides, carbon monoxide, carbon dioxide, nitrogen, and other hazardous gas from thermal decomposition.

**Health hazards:** Harmful if swallowed. Causes mild skin irritation. Causes eye irritation.

**Environmental hazards:** No hazards are found.

**Other hazards:** No information available.

**Product description:** substance (✓); preparation/mixture ( )

Ingredient (s)	CAS No.	% by weight
Halquinol	8067-69-4	≥99%
Non-hazardous ingredients	--	<1%

**Persons using this product should consult a physician or other medical professional if an accident involving this product in injury. Specific first-aid measures are as follows:**

**Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

**Skin Contact:** Wash with plenty water, If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

**Eyes Contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. If eye irritation persists: Get medical advice/attention.

**Ingestion:** Rinse mouth. Do not induce vomiting without professional instruction. Get medical attention if discomfort occurs.

**Acute effect and delayed effect:** Acute effect: Harmful if swallowed. Causes mild skin irritation. Causes eye irritation. Delayed effect: Not found.

**Personal protective equipment:** Recommend wearing protective gloves for industrial hygienic purpose. Wear respirators and safety goggles when exposure limits are exceeded or liquid may splash.



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**Indication of any immediate medical attention and special treatment needed:** Treat according to symptoms and exposure dose.

**Extinguishing Media:** In case of a fire, use dry chemical for small fire; water fog, foam or CO<sub>2</sub> for large fire. Do NOT use water jet which may make molten material splash. Seek advice from local fire-fighting authority.

**Special hazards arising from the chemical:** It may release smoke, nitrogen oxides, carbon monoxide, carbon dioxide, nitrogen, and other hazardous gas from thermal decomposition.

**Special Fire-Fighting Method:**

If there is no danger, remove all sources of ignition.

Extinguish fire from upwind, and the fire extinguishing method should be appropriate to the situation in the surroundings.

Cool surrounding facilities, etc. with water spray.

Remove containers from fire area if it can be done without risk.

**Special actions for fire-fighters:** Firefighters must wear self-contained breathing apparatus and full protective equipment. Check whether the protective equipment is in good condition before use.

**Personal precautions:** Use proper personal protective equipment as indicated in Section 8.

**Emergency procedures:** Due to the nature of this product, there are no special requirement.

**Environmental Precautions:** Keep collected waste out of municipal sewers and open bodies of water. Comply with local and national laws and regulations.

**Measures for Cleaning/Collection:**

Due to the nature of this product, there are no special measure for collection.

Collect it into a proper container for disposal.

Avoid generating dust during collection and clean-up.

**Precautions for safe handling:**

Wash hands thoroughly after handling.

Do not eat, drink or smoke when using this product.

**Storage:**

**Requirements to be met by storerooms:** Store it in a well-ventilated, cool and dry store room. Keep container closed when not in use.

**Incompatible materials:** Strong acids, strong oxidants.

**Packing material:** Paperboard Barrel, Galvanized Barrel.

**Additional Information:** The storeroom should be equipped with proper facilities for accidental leakage and fire.



#### Occupational Exposure Limits:

Ingredients	OELs (mg/m <sup>3</sup> ) (GBZ 2.1-2007)			ACGIH TLV-TWA
	MAC	PC-TWA	PC-STEL	
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

**Monitoring Method:** The hazardous substances should be monitored per GBZ 159 "Sampling code for monitoring of hazardous substances in workplace air ". The well-accepted monitoring methods of other countries are also can be adopted.

**Biological limit:** Not data available

#### Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits.

Install washer eyes and safety showers near to the handling and storage area.

#### Personal Protective Equipment (For workers):

##### Protection of Hands:

Recommend wearing protective gloves for industrial hygienic purpose.



**Protection of Eyes:** Wear safety glasses when working in a dusty environment.



**Respiratory Protection:** Use an approved respirator if exposure limit is exceeded or if irritation or other symptoms occur.



**Protection of Body:** Recommend wearing uniforms.





**General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.  
Wash hands before breaks and at the end of work.  
Avoid contact with eyes and skin.

**Form**

Solid (flake)

**Color**

White

**Odor**

Phenolic odor

**pH**

No data available

**Boiling Range**

No data available

**General Information**

**Melting point/Melting range**

72-76 °C

**Flash point**

No data available

**Flammable/Explosive Limits-Lower Vol %**

No data available

**Flammable/Explosive Limits-Upper Vol %**

No data available

**Density**

No data available

**Relative Vapor density**

No data available

**Vapor pressure**

No data available

**Solubility in/Miscibility with Water**

Almost insoluble in water.

**n-octanol/Water Partition Coefficient**

No data available

**Self-igniting Temperature**

No data available

**Decomposition Temperature**

No data available

**Odor Threshold Value**

No data available

**Evaporation Rate**

No data available

**Viscosity**

No data available

**Flammability (solid, gas, etc.)**

Non-flammable

**Chemical Stability:** Stable under normal temperatures and pressures.

**Possibility of hazardous reactions:** The product is not flammable, and has no special danger.

**Conditions to Avoid:** High temperature.

**Incompatible materials:** Strong acids, strong oxidants.

**Hazardous decomposition products:** Nitrogen oxides, carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, nitrogen.

**Product Toxicity Data:**

Ingredient (s)	CAS No.	LD <sub>50</sub> /LC <sub>50</sub> (median lethal dose)
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8-Hydroxyquinoline	148-24-3	Acute toxicity (oral) LD <sub>50</sub> : 790 mg/kg (rat) Data source: ECHA
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Classification of the whole product	Acute toxicity (oral) - Category 4.
<b>Skin corrosion/irritation:</b>	8-Hydroxyquinoline (CAS: 148-24-3): Category 3 (HSNO CCID)
<b>Serious eye damage/eye irritation:</b>	Classification of the whole product: Category 3 8-Hydroxyquinoline (CAS: 148-24-3): Category 2B (HSNO CCID)
<b>Respiratory/ Skin sensitization:</b>	Classification of the whole product: Category 2B
<b>Germ cell mutagenicity:</b>	No classification for this product.
<b>Carcinogenicity:</b>	No classification for this product.
<b>Reproductive Toxicity:</b>	No classification for this product.
<b>Specific target organ toxicity, single exposure:</b>	No classification for this product.
<b>Specific target organ toxicity, repeated exposure:</b>	No classification for this product.
<b>Aspiration hazard:</b>	No classification for this product.
<b>Effects on or via lactation:</b>	No classification for this product.
<b>Toxicokinetics, metabolism and distribution of information:</b>	No relevant information.
<b>Other health hazards:</b>	No relevant information.

**Ecotoxicity:** No data available for the whole product.

Classification of the whole product: not classified

**Persistence and Degradability:** No data available.

**Bioaccumulative Potential:** No data available.

**Mobility in Soil:** As it is in liquid status, it can move in soil.

**Chemical Waste:** Transport to specialized waste disposal sites for disposal. It must strictly follow local regulations for disposal.

**Contaminated packaging:** The container or packaging may remain noxious substance and should be disposed as a hazardous waste.

**Cautions for disposal:**

Do not allow product to reach sewage system.

Do not throw it into any open bodies of water.

It is recommended to use incineration method to dispose of waste.

**DOT/Air-Transportation-IATA/ICAO/Sea-Transportation-IMO/IMDG:**

**Proper Shipping Name:** Not regulated.



**Hazard Class:** Not classified.

**UN Code:** Not regulated.

**Packing Group:** Not classified.

**Packing Group Symbol:** Not classified.

**Marine Pollutant (Yes/No):** No

**EMS NO.:** Not regulated.

**Note:**

*Check whether the package is completed or sealed before transporting; make sure there are no damage and no falling down of packages during transporting; the transport vehicle should be equipped with fire-fighting equipments and emergency facilities for handling with release; do NOT transport this product together with incompatible substances.*

#### **Laws and Regulations of China:**

##### **General rule for classification and hazard communication of chemicals (GB 13690-2009):**

Physical hazards: Not classified

Health hazards: Acute toxicity (oral) - Category 4.

Skin corrosion/irritation - Category 3.

Serious eye damage/eye irritation - Category 2B.

Environmental hazards: Not classified

##### **The Principle of Classification of Transport Packaging Groups of Dangerous Goods (GB/T 15098-2008):**

Not applicable

**Dangerous Chemicals List (GB 12268-2012):** Not listed.

**Dangerous chemicals directory (2015):** The Principles for the Definition and Determination of Hazardous Chemicals is applicable for this product.

**Production Safety Law of the People's Republic of China:** As for safe production and management, emergency handling and legal liability, comply with relevant provisions of this law.

**Occupation Disease Prevention Law the People's Republic of China:** As for precautions, prevention, management and occupational disease diagnosis, comply with relevant provisions of this law.

**The Environment Protection Law of the People's Republic of China:** As for the prevention of environment pollution

and environment protection, comply with relevant provisions of this law.

#### **International Laws and Regulations:**

##### **TSCA (Toxic Substance Control Act):**

Ingredient (s)	CAS No.	TSCA Inventory
8-Hydroxyquinoline (CAS: 148-24-3)	148-24-3	Listed

#### **(EC) 1272/2008 Annex VI Table 3.1:**

**EC No. 1272/2008 Classification**



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Ingredient(s)	CLASS. CODE	HAZARD CODE
Not applicable	Not applicable	Not applicable

**Clean Water Act:**

Chemical Name	Reportable Quantities	Hazardous Substances	Priority Pollutants	Toxic Pollutants
Not applicable	Not applicable	Not listed	Not listed	Not listed

**Carcinogenicity categories:** 8-Hydroxyquinoline (CAS: 148-24-3): IARC-3.

**DISCLAIMER:**

All the information of this MSDS is true and effective, and only for reference. Our company will not control the way how people use it, neither will we be responsible for any consequence. The users shall decide how to properly use the product or adopt certain production way for some special purpose. The above mentioned precautionary measures are helpful to avoid damage to the property or life safety during the operation or use of this product.

**References:**

GB 16483-2008, GB 13690-2009, GB/T 17519-2013, GB 30000.2-2013~30000.29-2013, GB/T 15098-2008, GB12268-2012, Dangerous chemicals directory (2015), etc.

**Full description of some acronyms:**

**GHS-Globally Harmonized System of Classification and Labelling of Chemicals**

**CAS-Chemical Abstracts Service**

**EINECS-European Inventory of Existing Commercial Chemical Substances**

**ACGIH- American Conference of Governmental Industrial Hygienists**

**OSHA-Occupational Safety and Health Administration**

**IARC- International Agency for Research on Cancer**

**NTP- The National Toxicology Program**

**IMO-International Maritime Organization**

**IMDG-International Maritime Dangerous Goods**

**IATA-International Air Transport Association**

**ICAO-International Civil Aviation Organization**

**TSCA-Toxic Substance Control Act**

**ECHA- European Chemicals Agency**

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