

## Chemical Safety Data Sheet MSDS / SDS

**KHELLIN**Revision Date:2026-05-31 Revision Number:1

---

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****Product identifier**

Product name : KHELLIN  
CBnumber : CB5269554  
CAS : 82-02-0  
EINECS Number : 201-392-8  
Synonyms : KHELLIN,Visnagin

**Relevant identified uses of the substance or mixture and uses advised against**

Relevant identified uses : For R&D use only. Not for medicinal, household or other use.  
Uses advised against : none

**Company Identification**

Company : Chemicalbook  
Address : Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing  
Telephone : 010-86108875

---

**SECTION 2: Hazards identification****GHS Label elements, including precautionary statements**

Symbol(GHS)



Signal word

Danger

**Precautionary statements**

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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

Continuerinsing.

**Hazard statements**

H315 Causes skin irritation

H319 Causes serious eye irritation

H335 May cause respiratory irritation

**SECTION 3: Composition/information on ingredients**

---

## Substance

Product name	: KHELLIN
Synonyms	: KHELLIN, Visnagin
CAS	: 82-02-0
EC number	: 201-392-8
MF	: C14H12O5
MW	: 260.24

---

## SECTION 4: First aid measures

### General advice

First aiders need to protect themselves. Show this safety data sheet to the doctor in attendance.

### If inhaled

After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.

### In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.

### In case of eye contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

### If swallowed

If swallowed: give water to drink (two glasses at most). Seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious), administer activated charcoal (20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible.

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

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

### Protection of first-aiders

For personal protection see section 8.

### Notes to physician

No data available

---

## SECTION 5: Firefighting measures

### Suitable extinguishing media

Water Foam Carbon dioxide (CO<sub>2</sub>) Dry powder

### Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

### Specific hazards during fire fighting

Combustible. Development of hazardous combustion gases or vapours possible in the event of fire.

### Hazardous combustion products

Carbon oxides

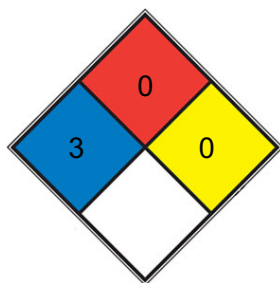
### Specific extinguishing methods

Prevent fire extinguishing water from contaminating surface water or the ground water system.

### Special protective equipment for fire-fighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

### NFPA 704



■ HEALTH 3 Short exposure could cause serious temporary or moderate residual injury (e.g. [liquid hydrogen](#), [sulfuric acid](#), [calcium hypochlorite](#), hexafluorosilicic acid)

■ FIRE 0 Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand. Materials that will not burn in air when exposed to a temperature of 820 °C (1,500 °F) for a period of 5 minutes.(e.g. Carbon tetrachloride)

■ REACT 0 Normally stable, even under fire exposure conditions, and is not reactive with water (e.g. helium,[N2](#))

□ SPEC.  
HAZ.

---

## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid generation and inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. Advice for emergency responders: For personal protection see section 8.

### Environmental precautions

Do not let product enter drains.

### Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully. Dispose of

properly. Clean up affected area. Avoid generation of dusts.

---

## SECTION 7: Handling and storage

### Handling

#### Advice on safe handling

Work under hood. Do not inhale substance/mixture.

#### Avoidance of contact

Strong oxidizing agents

### Storage

#### Further information on storage conditions

Tightly closed. Dry. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorised persons.

#### Storage class

6.1C, Combustible, acute toxic Cat.3 / toxic compounds or compounds which causing chronic effects

#### Recommended storage temperature

Recommended storage temperature see product label.

---

## SECTION 8: Exposure controls/personal protection

### Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

### Engineering measures

No data available

### Personal protective equipment

#### Respiratory protection

required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

#### Recommended Filter type

Filter type P3

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

#### Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Safety glasses

#### Skin and body protection

protective clothing

#### Hand protection

#### Material

Nitrile rubber

**Break through time**

480 min

**Glove thickness**

0.11 mm

**Protective index**

Full contact

**Manufacturer**

(KCL 740 / Aldrich Z677272, Size M)

**Material**

Nitrile rubber

**Break through time**

480 min

**Glove thickness**

0.11 mm

**Protective index**

Splash contact

**Manufacturer**

(KCL 740 / Aldrich Z677272, Size M)

**Manufacturer**

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

**Remarks**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it. If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Hygiene measures**

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

---

## SECTION 9: Physical and chemical properties

### Information on basic physicochemical properties

powder

---

**Color**

light yellow

**Odor**

No data available

**Odor Threshold**

No data available

## **pH**

No data available

## **Melting point/ range**

150 - 154 °C 150 - 154 °C

Method: lit.

## **Boiling point/boiling range**

180 - 200 °C (0.07 hPa)

Method: lit.

## **Flash point**

No data available

## **Evaporation rate**

No data available

## **Flammability (solid, gas)**

No data available

## **Flammability (liquids)**

No data available

## **Burning rate**

No data available

## **Upper explosion limit / Upper flammability limit**

No data available

## **Lower explosion limit / Lower flammability limit**

No data available

## **Vapor pressure**

No data available

## **Relative vapor density**

No data available

## **Relative density**

1.1954 (rough estimate)

## **Density**

1.1954 (rough estimate)

**Water solubility**

247.2g/L(25 °C)

**Partition coefficient: n-octanol/water**

No data available

**Autoignition temperature**

No data available

**Decomposition temperature**

No data available

**Viscosity, dynamic**

No data available

**Viscosity, kinematic**

No data available

**Flow time**

No data available

**Explosive properties**

No data available

**Oxidizing properties**

No data available

**Molecular weight**

260.24 g/mol

**Particle characteristics Particle size**

No data available

**Solubility**

Chloroform (Slightly), Methanol (Slightly)

**Physical state**

crystalline

---

## SECTION 10: Stability and reactivity

**Reactivity**

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

## Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

## Possibility of hazardous reactions

No data available

## Conditions to avoid

no information available

## Incompatible materials

Strong oxidizing agents

## Hazardous decomposition products

In the event of fire: see section 5

---

# SECTION 11: Toxicological information

## 11.1 Information on toxicological effects

### Acute toxicity

LD50 Oral - Rat - 68.8 mg/kg

Acute toxicity estimate Inhalation - 4 h - 0.51 mg/l - dust/mist (Expert judgement)

Acute toxicity estimate Dermal - 300.1 mg/kg (Expert judgement)

### Skin corrosion/irritation

Remarks: No data available

### Serious eye damage/eye irritation

Remarks: No data available

### Respiratory or skin sensitization

Classified based on available data. For more details, see section 2

### Germ cell mutagenicity

Classified based on available data. For more details, see section 2

### Carcinogenicity

Classified based on available data. For more details, see section 2

### Reproductive toxicity

Classified based on available data. For more details, see section 2

### Specific target organ toxicity - single exposure

May cause respiratory irritation.

### Specific target organ toxicity - repeated exposure

Classified based on available data. For more details, see section 2

### Aspiration hazard

Classified based on available data. For more details, see section 2

## 11.2 Additional Information

RTECS: LV1050000

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

---

## SECTION 12: Ecological information

### Ecotoxicity

#### Components:

#### Khellin:

#### Toxicity to fish

Remarks: No data available

### Persistence and degradability

#### Components:

#### Khellin:

#### Biodegradability

Remarks: No data available

### Bioaccumulative potential

#### Components:

#### Khellin:

#### Bioaccumulation

Remarks: No data available

### Mobility in soil

#### Components:

#### Khellin:

#### Stability in soil

Remarks: No data available

### Other adverse effects

#### Components:

#### Khellin:

#### Additional ecological information

No data available

---

## SECTION 13: Disposal considerations

## Disposal methods

### Waste from residues

Offer surplus and non-recyclable solutions to a licensed disposal company.

---

## SECTION 14: Transport information

### International Regulations

#### IATA-DGR

UN/ID No. : UN 2811

Proper shipping name : Toxic solid, organic, n.o.s.

(Khellin)

Class : 6.1

Packing group : III

Labels : Division 6.1 - Toxic substances

Packing instruction (cargo aircraft) : 677

Packing instruction (passenger aircraft) : 670

#### IMDG-Code

UN number : UN 2811

Proper shipping name : TOXIC SOLID, ORGANIC, N.O.S.

(Khellin)

Class : 6.1

Packing group : III

Labels : 6.1

EmS Code : F-A, S-A

Marine pollutant : no

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

### National Regulations

#### JT/T 617

UN number : UN 2811

Proper shipping name : TOXIC SOLID, ORGANIC, N.O.S.

(Khellin)

Class : 6.1

Packing group : III

Labels : 6.1

Environmentally hazardous : no

### Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

---

## SECTION 15: Regulatory information

Downstream users need to comply with the conditions of safe use of the chemical, understand the environmental and health hazard and risk management measures identified on the SDS as well as the local/national regulations concerning the chemical.

### **National regulatory information**

#### **Regulations on Safety Management of Hazardous Chemicals**

#### **Catalogue of Hazardous Chemicals**

#### **Hazardous Chemicals for Priority Management**

Not applicable under SAWS

#### **Regulation of Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals**

#### **China Severely Restricted Toxic Chemicals for Import and Export**

Not applicable

#### **Measures on the Environmental Administration of New Chemical Substances Registration**

#### **Registration/Notification number**

B1A222212744

---

## SECTION 16: Other information

### **Full text of other abbreviations**

AiIC - Australian Inventory of Industrial Chemicals

ANTT - National Agency for Transport by Land of Brazil

ASTM - American Society for the Testing of Materials

bw - Body weight

CMR - Carcinogen, Mutagen or Reproductive Toxicant

DIN - Standard of the German Institute for Standardisation

DSL - Domestic Substances List (Canada)

EC<sub>x</sub> - Concentration associated with x% response

EL<sub>x</sub> - Loading rate associated with x% response

EmS - Emergency Schedule

ENCS - Existing and New Chemical Substances (Japan)

ErC<sub>x</sub> - Concentration associated with x% growth rate response

ERG - Emergency Response Guide  
GHS - Globally Harmonised System  
GLP - Good Laboratory Practice  
IARC - International Agency for Research on Cancer  
IATA - International Air Transport Association  
IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk  
IC50 - Half maximal inhibitory concentration  
ICAO - International Civil Aviation Organization  
IECSC - Inventory of Existing Chemical Substances in China  
IMDG - International Maritime Dangerous Goods  
IMO - International Maritime Organisation  
ISHL - Industrial Safety and Health Law (Japan)  
ISO - International Organisation for Standardisation  
KECI - Korea Existing Chemicals Inventory  
LC50 - Lethal Concentration to 50 % of a test population  
LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose)  
MARPOL - International Convention for the Prevention of Pollution from Ships  
MERCOSUR - The Agreement for the Facilitation of the Transport of Dangerous Goods  
n.o.s. - Not Otherwise Specified  
Nch - Chilean Norm  
NO(A)EC - No Observed (Adverse) Effect Concentration  
NO(A)EL - No Observed (Adverse) Effect Level  
NOELR - No Observable Effect Loading Rate  
NOM - Official Mexican Norm  
NTP - National Toxicology Program  
NZIoC - New Zealand Inventory of Chemicals  
OECD - Organisation for Economic Co-operation and Development  
OPPTS - Office of Chemical Safety and Pollution Prevention  
PBT - Persistent, Bioaccumulative and Toxic substance  
PICCS - Philippines Inventory of Chemicals and Chemical Substances  
(Q)SAR - (Quantitative) Structure Activity Relationship  
REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals  
SADT - Self-Accelerating Decomposition Temperature  
SDS - Safety Data Sheet  
TCSI - Taiwan Chemical Substance Inventory  
TDG - Transportation of Dangerous Goods  
TECI - Thailand Existing Chemicals Inventory  
TSCA - Toxic Substances Control Act (United States)  
UN - United Nations  
UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods  
vPvB - Very Persistent and Very Bioaccumulative  
WHMIS - Workplace Hazardous Materials Information System

**Disclaimer:**

The information in this MSDS is only applicable to the specified product, unless otherwise specified, it is not applicable to the mixture of this product and other substances. This MSDS only provides information on the safety of the product for those who have received the appropriate professional training for the user of the product. Users of this MSDS must make independent judgments on the applicability of this SDS. The authors of this MSDS will not be held responsible for any harm caused by the use of this MSDS.