

## Chemical Safety Data Sheet MSDS / SDS

## Acid Green 25

Revision Date:2023-04-29 Revision Number:1

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

## Product identifier

Product name : Acid Green 25  
CBnumber : CB3491854  
CAS : 4403-90-1  
EINECS Number : 224-546-6  
Synonyms : Acid Green 25,CI 61570

## 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 : 400-158-6606

## SECTION 2: Hazards identification

## Classification of the substance or mixture

Hazardous to the aquatic environment, long-term (Chronic) - Category Chronic 4

## Label elements

## Pictogram(s)

Signal word : Warning

## Hazard statement(s)

H317 May cause an allergic skin reaction  
H320 Causes eye irritation  
H401 Toxic to aquatic life  
H411 Toxic to aquatic life with long lasting effects

## Precautionary statement(s)

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P264 Wash hands thoroughly after handling.  
P264 Wash skin thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

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

P501 Dispose of contents/container to.....

#### **Prevention**

P273 Avoid release to the environment.

#### **Response**

none

#### **Storage**

none

#### **Disposal**

P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

#### **Other hazards**

no data available

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## SECTION 3: Composition/information on ingredients

### **Substance**

|              |  |
|--------------|--|
| Product name | : Acid Green 25  |
| Synonyms     | : Acid Green 25,CI 61570   |
| CAS          | : 4403-90-1  |
| EC number    | : 224-546-6  |
| MF           | : C <sub>28</sub> H <sub>20</sub> N <sub>2</sub> Na <sub>2</sub> O <sub>8</sub> S <sub>2</sub> |
| MW           | : 622.58   |

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## SECTION 4: First aid measures

### **Description of first aid measures**

#### **If inhaled**

Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately.

Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

#### **Following skin contact**

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

#### **Following eye contact**

Rinse with pure water for at least 15 minutes. Consult a doctor.

#### **Following ingestion**

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.

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

**SYMPTOMS:** Symptoms of exposure to this compound may include irritation of the skin, eyes, mucous membranes and upper respiratory tract.

**ACUTE/CHRONIC HAZARDS:** This compound may be harmful by inhalation, ingestion, or skin absorption. It is an irritant of the skin, eyes, mucous membranes and upper respiratory tract. (NTP, 1992)

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

Immediate first aid: Ensure that adequate decontamination has been carried out. If patient is not breathing, start artificial respiration, preferably with a demand valve resuscitator, bag-valve-mask device, or pocket mask, as trained. Perform CPR if necessary. Immediately flush contaminated eyes with gently flowing water. Do not induce vomiting. If vomiting occurs, lean patient forward or place on the left side (head-down position, if possible) to maintain an open airway and prevent aspiration. Keep patient quiet and maintain normal body temperature. Obtain medical attention. Poisons A and B

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## **SECTION 5: Firefighting measures**

### **Extinguishing media**

Fires involving this material can be controlled with a dry chemical, carbon dioxide or Halon extinguisher. (NTP, 1992)

### **Specific Hazards Arising from the Chemical**

Flash point data for this chemical are not available. It is probably combustible. (NTP, 1992)

### **Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

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## **SECTION 6: Accidental release measures**

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

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

### **Environmental precautions**

Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be avoided.

### **Methods and materials for containment and cleaning up**

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

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## **SECTION 7: Handling and storage**

### **Precautions for safe handling**

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

### Conditions for safe storage, including any incompatibilities

Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials.

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## SECTION 8: Exposure controls/personal protection

### Control parameters

#### Occupational Exposure limit values

no data available

#### Biological limit values

no data available

### Exposure controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

### Individual protection measures

#### Eye/face protection

Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

#### Skin protection

Wear fire/flame resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

#### Respiratory protection

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

#### Thermal hazards

no data available

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## SECTION 9: Physical and chemical properties

### Information on basic physicochemical properties

|  |                            |
|--|----------------------------|
| Physical state   | neat                       |
| Colour   | Bluish green powder        |
| Odour  | no data available          |
| Melting point/freezing point                             | > 440 °C.                  |
| Boiling point or initial boiling point and boiling range | 167°C(lit.)                |
| Flammability   | no data available          |
| Lower and upper explosion limit/flammability limit       | no data available          |
| Flash point  | 82°C(lit.)                 |
| Auto-ignition temperature                                | Remarks:Non self-igniting. |

|                                       |  |
|---------------------------------------|--|
| Decomposition temperature             | no data available  |
| pH                                    | no data available  |
| Kinematic viscosity                   | no data available  |
| Solubility                            | 5 to 10 mg/mL at 70° F (NTP, 1992)   |
| Partition coefficient n-octanol/water | Pow = Ca. 0.011. Temperature:20 °C. Remarks:Standard dev. 0.0012.;log Pow = Ca. -1.966.<br>Temperature:20 °C. Remarks:Standard dev. 0.046. |
| Vapour pressure                       | 7.3X10-25 mm Hg at 25 deg C  |
| Density and/or relative density       | Temperature:20 °C.   |
| Relative vapour density               | no data available  |
| Particle characteristics              | no data available  |

## SECTION 10: Stability and reactivity

### Reactivity

Slightly soluble in water.

### Chemical stability

no data available

### Possibility of hazardous reactions

D & C GREEN 5 is incompatible with strong oxidizing agents. (NTP, 1992).

### Conditions to avoid

no data available

### Incompatible materials

no data available

### Hazardous decomposition products

When heated to decomposition it emits very toxic fumes of /nitrogen and sulfur oxides as well as sodium monoxide/.

## SECTION 11: Toxicological information

### Acute toxicity

- Oral: LD50 - rat - > 5 000 mg/kg bw.
- Inhalation: no data available
- Dermal: no data available

### Skin corrosion/irritation

no data available

### Serious eye damage/irritation

no data available

### **Respiratory or skin sensitization**

no data available

### **Germ cell mutagenicity**

no data available

### **Carcinogenicity**

no data available

### **Reproductive toxicity**

no data available

### **STOT-single exposure**

no data available

### **STOT-repeated exposure**

no data available

### **Aspiration hazard**

no data available

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## **SECTION 12: Ecological information**

### **Toxicity**

Toxicity to fish: LC50; Species: Pimephales promelas (Fathead Minnow); Conditions: freshwater, static, 18 deg C, pH 6.6-7.1, alkalinity 19-32 mg/L CaCO<sub>3</sub>, dissolved oxygen > or =5 mg/L; Concentration: >10000 ug/L for 24 hr /formulation

Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia magna - > 67 mg/L - 48 h.

Toxicity to algae: no data available

Toxicity to microorganisms: no data available

### **Persistence and degradability**

AEROBIC: D&C Green No. 5, present at 2.5 ppm, reached 0% of its theoretical BOD in 5-days using a sewage sludge inoculum in the 5-Day BOD test. It was noted that the color of the dye interfered with the determination(1). D&C Green No. 5, present at 100 mg/L, exhibited <25% elimination after 3 hours and overall <70% elimination in 42 days using an activated sludge inoculum at 0.5 mg/L dry material in the modified static test. Therefore, the dye is considered to be partially biodegradable(2).

### **Bioaccumulative potential**

An estimated BCF of 3 was calculated in fish for D&C Green No. 5(SRC), using an estimated log K<sub>ow</sub> of 2.00(1) and a regression-derived equation(1). According to a classification scheme(2), this BCF suggests the potential for bioconcentration in aquatic organisms is low(SRC).

### **Mobility in soil**

Acid dyes, such as D&C Green No. 5, typically exhibit very low solubilities in octanol and have water solubilities that exceed 100 g/L.

Therefore, these compounds would be expected to remain in the water column in the aquatic environment and show little affinity for organic matter(1). Estimation methods are not currently available to adequately predict the K<sub>oc</sub> of most dyes(SRC).

## Other adverse effects

no data available

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## SECTION 13: Disposal considerations

### Disposal methods

#### Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

#### Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

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## SECTION 14: Transport information

### UN Number

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

### UN Proper Shipping Name

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

### Transport hazard class(es)

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

### Packing group, if applicable

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

### Environmental hazards

ADR/RID: No

IMDG: No

IATA: No

### Special precautions for user

no data available

### **Transport in bulk according to IMO instruments**

no data available

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## **SECTION 15: Regulatory information**

### **Safety, health and environmental regulations specific for the product in question**

#### **European Inventory of Existing Commercial Chemical Substances (EINECS)**

Listed.

#### **EC Inventory**

Listed.

#### **United States Toxic Substances Control Act (TSCA) Inventory**

Listed.

#### **China Catalog of Hazardous chemicals 2015**

Not Listed.

#### **New Zealand Inventory of Chemicals (NZIoC)**

Listed.

#### **PICCS**

Listed.

#### **Vietnam National Chemical Inventory**

Listed.

#### **IECSC**

Listed.

#### **Korea Existing Chemicals List (KECL)**

Listed.

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## **SECTION 16: Other information**

### **Abbreviations and acronyms**

CAS: Chemical Abstracts Service

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

IMDG: International Maritime Dangerous Goods

ATA: International Air Transportation Association

TWA: Time Weighted Average

STEL: Short term exposure limit

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

EC50: Effective Concentration 50%

### **References**



IPCS - The International Chemical Safety Cards (ICSC), website: <http://www.ilo.org/dyn/icsc/showcard.home>

HSDB - Hazardous Substances Data Bank, website: <https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm>

IARC - International Agency for Research on Cancer, website: <http://www.iarc.fr/>

eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: [http://www.echemportal.org/echemportal/index?pagelD=0&request\\_locale=en](http://www.echemportal.org/echemportal/index?pagelD=0&request_locale=en)

CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>

ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>

ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: <http://www.phmsa.dot.gov/hazmat/library/erg>

Germany GESTIS-database on hazard substance, website: <http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp>

ECHA - European Chemicals Agency, website: <https://echa.europa.eu/>

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