

SAFETY DATA SHEET

Version: v1

Revision Date: 2023-11-

08

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

1.1 Product identifiers

Product name : Chlorambucil
Product Number : C154015
Brand : aladdin
CAS-No. : 305-03-3

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

Identified uses : Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company : Shanghai Aladdin Biochemical Tech Co.,Ltd
Address : 36 Xinjinqiao Road, Shanghai
Telephone : 400-620-6333
Fax : no data available

1.4 Emergency telephone number

Emergency Phone : 0532-83889090

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

CFR 1910.1200: Acute Toxicity - Oral [Category 3] Skin Corrosion/Irritation [Category 2] Eye Damage/Irritation [Category 2A] Germ Cell Mutagenicity [Category 2] Carcinogenicity [Category 1A] Toxic to Reproduction [Category 1A] Specific Target Organ Toxicity (Single Exposure) [Category 1] Specific Target Organ Toxicity (Repeated Exposure) [Category 1]

2.2 GHS Label elements, including precautionary statements

Pictogram : no data available

Signal word : Danger

Hazard statement(s)

H301 : Toxic if swallowed
H314 : Causes severe skin burns and eye damage
H341 : Suspected of causing genetic defects
H350 : May cause cancer
H360 : May damage fertility or the unborn child
H372 : Causes damage to organs through prolonged or repeated exposure

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H373 Causes damage to organs through prolonged or repeated exposure

Precautionary statement(s)

P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P260 Do not breathe dust/fume/gas/mist/vapors/spray.
 P264 Wash hands [and ...] thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.
 P282 Wear cold insulating gloves/face shield/eye protection.
 P405 Store locked up.
 P501 Dispose of contents/container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms : 4-[4-[Bis(2-chloroethyl)amino]phenyl]butyric Acid
 Formula : C₁₄H₁₉Cl₂NO₂
 Molecular weight : 304.21
 CAS No. : 305-03-3
 EC-NO. : no data available

Component	Classification	Concentration
Chlorambucil	no data available	>98.0%

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

no data available

If inhaled

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician.

In case of skin contact

Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. Call a POISON CENTER or doctor/physician.

In case of eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Call a POISON CENTER or doctor/physician.

If swallowed

Immediately call a POISON CENTER or doctor/physician. Rinse mouth.

4.2 Most important symptoms and effects, both acute and delayed

no data available

4.3 Indication of any immediate medical attention and special treatment needed

no data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Dry chemical, foam, water spray, carbon dioxide.

Unsuitable extinguishing media

no data available

5.2 Special hazards arising from the substance or mixture

Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume. Closed containers may explode from heat of a fire.

5.3 Advice for firefighters

Wear self-contained breathing apparatus if possible.

5.4 Further information

Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Keep people away from and upwind of spill/leak. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.

6.2 Environmental precautions

Prevent product from entering drains.

6.3 Methods and materials for containment and cleaning up

Clean up the dust and collect it in a closed container, taking care not to disperse it. Adhered or aggregated materials shall be disposed of in a timely manner in accordance with local laws and regulations.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent dispersion of dust.

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Wash hands and face thoroughly after handling. Use a closed system if possible. Use a local exhaust if dust or aerosol will be generated. Avoid all contact! Conditions for safe storage, including any incompatibilities

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Store in a refrigerator. Store locked up. Store away from incompatible materials such as oxidizing agents. Heat-sensitive

7.3 Specific end use(s)

no data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Appropriate engineering controls

Follow safe industrial engineering/laboratory practices when handling any chemical. Install a closed system or local exhaust. Also install safety shower and eye bath.

Personal protective equipment

Eyeface protection

Safety goggles. A face-shield, if the situation requires.

Skin protection

Gloves must be checked before use. Please use proper methods to remove the gloves (do not touch the outer surface of the gloves), and avoid any skin parts contacting the product. After use, please handle the contaminated gloves carefully according to relevant laws and regulations and effective laboratory rules and procedures. Please clean and blow dry the protective gloves selected for your hands must meet the specifications given in regulation (EU) 2016 / 425 and the en 374 standard derived from it.

Body Protection

Impervious gloves. Impervious protective clothing. Protective boots, if the situation requires.

Respiratory protection

Dust respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Use respirators approved under appropriate government standards and follow local and national regulations.

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance	form: Crystal - Powder Solid color: White - Slightly pale yellow
b) Odour	no data available
c) Odour Threshold	no data available
d) pH	no data available
e) Melting point/freezing point	67°C (153°F)
f) Initial boiling point and boiling range	no data available

g) Flash point	no data available
h) Evaporation rate	no data available
i) Flammability (solid, gas)	no data available
j) Upper/lower flammability or explosive limits	no data available
k) Vapour pressure	no data available
l) Vapour density	no data available
m) Relative density	no data available
n) Water solubility	Water:Very slightly soluble (7.5g/L, 25°C);Slightly Soluble:Acetone, ChloroForm, Ethanol;Soluble:Ether, Benzene
o) Partition coefficient: n-octanol/water	no data available
p) Auto-ignition temperature	no data available
q) Decomposition temperature	no data available
r) Viscosity	no data available
s) Explosive properties N	no data available
t) Oxidizing properties N	no data available

9.2 Other safety information

no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

no data available

10.2 Chemical stability

Stable under proper conditions.

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

Oxidizing agents

10.6 Hazardous decomposition products

Carbon dioxide, Carbon monoxide,Nitrogen oxides (NOx),Hydrogen chloride

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

orl-rat LD50:76 mg/kg ipr-rat LD50:14 mg/kg scu-mus LD50:26 mg/kg

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

dlt-mus-ipr 5 mg/kg cyt-hmn-lym 250 ug/L trn-mus-ipr 6 mg/kg

Carcinogenicity

orl-man TDLo:84 mg/kg/2.5Y-C ipr-rat TDLo:120 mg/kg/26W-I skn-mus TDLo:108 mg/kg/9W-I

Reproductive toxicity

orl-wmn TDLo:5160 ug/kg (33-75D preg) unr-man TDLo:5857 ug/kg (30W male) orl-rat TDLo:8 mg/kg (15D preg)

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Additional Information

RTECS Number:ES7525000;IARC:Group 1 (Carcinogenic to humans);NTP:a (Known to be carcinogens)

SECTION 12: Ecological information

12.1 Toxicity

no data available

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

3

12.4 Mobility in soil

Log Pow: 1.70 Soil adsorption (Koc): 11 Henry's Law (PaM /mol): 1.73×10^{-3} -5

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

no data available

SECTION 13:

13.1 Disposal considerations

Product

Disposal of product: Recycle to process if possible. It is the generator's responsibility to comply with Federal, State and Local rules and regulations. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. This section is intended to provide assistance but does not replace these laws, nor does compliance in accordance with this section ensure regulatory compliance according to the law. US EPA guidelines for Identification and Listing of Hazardous Waste are listed in 40 CFR Parts 261. The product should not be allowed to enter the environment, drains, water ways, or the soil. Other considerations: Observe all federal, state and local regulations when disposing of the substance.

Contaminated packaging

Disposal of container: Dispose of as unused product. Do not re-use empty containers.

SECTION 14: Transport information

DOT (US)

UN number: UN2811	Packing group: III	Class: 6.1
Proper shipping name: Toxic solids, organic, n.o.s	Reportable Quantity(RQ): no data available	Poison Inhalation Hazard: no data available
Environmental Hazards: no data available		

IMDG

UN number: UN2811	Packing group: III	EMS-No: EmS number: F-A, S-A
Proper shipping name: Toxic solids, organic, n.o.s		

IATA

UN number: UN2811	Packing group: III	Class: 6.1
Proper shipping name: Toxic solids, organic, n.o.s		

SECTION 15: Regulatory information

Toxic Substance Control Act

This product is NOT on the EPA Toxic Substances Control Act (TSCA) inventory. The following notices are required by 40 CFR 720.36 (C) for those products not on the inventory list: (i) These products are supplied solely for use in research and development by or under the supervision of a technically qualified individual as defined in 40 CFR 720.0 et sec. (ii) The health risks of these products have not been fully determined. Any information that is or becomes available will be supplied on a SDS sheet. US Federal Regulations

US Federal Regulations

SARA 313: Not Listed

SARA 302: Not Listed

State Regulations

Massachusetts Listed

New Jersey Not Listed

Pennsylvania Listed

Other Information

NFPA Rating: HMIS Classification: Health: 0 Health: 0 Flammability: 0 Flammability: 0 Instability: 0 Physical: 0

International Inventories

Canada: DSL On DSL

EC-No: 206-162-0

SECTION 16: Other information

Further information

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