

## Material Safety Data Sheet

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Version 1.1  
According to 91/155/EEC

Classified as Hazardous according to the criteria of EU Annex 1 and NOHSC.

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#### 1 - Product and Company Information

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Product Name	ALLOPURINOL
Product Number	A8003
Company	Sigma-Aldrich Pty, Ltd Unit 2, 14 Anella Avenue Castle Hill NSW 1765 Australia
Technical Phone #	+61 2 9841 0555
Fax	+61 2 9841 0500
Emergency Phone #	+61 2 9841 0566

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#### 2 - Composition/Information on Ingredients

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Product Name	CAS #	EC no	Annex I Index Number
4-HYDROXYPYRAZOLO(3,4-D)PYRIMIDINE	315-30-0	206-250-9	None
Formula	C5H4N4O		
Molecular Weight	136.11 AMU		
Synonyms	Adenock * AL-100 * Allopurinol * Allozym * Allural * Alositol * Aluline * Anoprolin * Anzief * Bleminol * Bloxanth * BW 56-158 * Caplenal * Cellidrin * Dabrosin * Embarin * Epidropal * 1,5-Dihydro-4H-pyrazolo(3,4-d)pyrimidin-4-one * Foligan * Gichtex * HPP * 4'-Hydroxypyrazolol(3,4-d)pyrimidine * 4-Hydroxypyrazolopyrimidine * 4-Hydroxypyrazolo(3,4-d)pyrimidine * 4-Hydroxypyrazolopyrimidine * 4-Hydroxypyrazolyl(3,4-d)pyrimidine * Ketanrift * Ketobun-A * Lopurin * Lysuron * Milurit * Miniplanor * Nektrohan * NSC-1390 * 4H-Pyrazolo(3,4-d)pyrimidin-4-one * Remid * Riball * Suspendol * Takanarumin * Uricemil * Uriprim * Urobenyl * Urosin * Zyloprim * Zyloric		

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#### 3 - Hazards Identification

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SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT  
Toxic if swallowed. May cause sensitization by skin contact.

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#### 4 - First Aid Measures

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AFTER INHALATION  
If inhaled, remove to fresh air. If breathing becomes difficult,

call a physician.

#### AFTER SKIN CONTACT

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

#### AFTER EYE CONTACT

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

#### AFTER INGESTION

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

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### 5 - Fire Fighting Measures

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#### EXTINGUISHING MEDIA

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

#### SPECIAL RISKS

Specific Hazard(s): Emits toxic fumes under fire conditions.

#### SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

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### 6 - Accidental Release Measures

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PERSONAL PRECAUTION PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL  
Evacuate area.

#### PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

#### METHODS FOR CLEANING UP

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

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### 7 - Handling and Storage

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#### HANDLING

Directions for Safe Handling: Avoid breathing dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

#### STORAGE

Conditions of Storage: Keep tightly closed.

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### 8 - Exposure Controls / Personal Protection

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#### ENGINEERING CONTROLS

Safety shower and eye bath. Use only in a chemical fume hood.

#### GENERAL HYGIENE MEASURES

Wash thoroughly after handling. Wash contaminated clothing before reuse.

## PERSONAL PROTECTIVE EQUIPMENT

Special Protective Measures: Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing.

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## 9 - Physical and Chemical Properties

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Appearance	Physical State: Solid	
Property	Value	At Temperature or Pressure
pH	N/A	
BP/BP Range	N/A	
MP/MP Range	300 °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	

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## 10 - Stability and Reactivity

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### STABILITY

Stable: Stable.

Materials to Avoid: Oxidizing agents.

### HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Nitrogen oxides.

### HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

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## 11 - Toxicological Information

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RTECS NUMBER: UR0785000

### ACUTE TOXICITY

LDLO

Oral

Woman

88 mg/kg

22D-I

Remarks: Blood:Leukopenia.

LD50  
Intraperitoneal  
Rat  
900 MG/KG

LD50  
Subcutaneous  
Rat  
2450 MG/KG

LD50  
Oral  
Mouse  
78 mg/kg

LD50  
Intraperitoneal  
Mouse  
214 MG/KG  
Remarks: Behavioral:Food intake (animal). Behavioral:Fluid intake. Behavioral:Ataxia.

LD50  
Subcutaneous  
Mouse  
298 MG/KG

#### SENSITIZATION

Skin: May cause allergic skin reaction.

#### 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

Skin Contact: May cause skin irritation.  
Skin Absorption: May be harmful if absorbed through the skin.  
Eye Contact: May cause eye irritation.  
Inhalation: Material may be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.  
Ingestion: Toxic if swallowed.

#### TARGET ORGAN INFORMATION

Liver. Kidneys. Blood.

#### CHRONIC EXPOSURE - TERATOGEN

Species: Mouse  
Dose: 50 MG/KG  
Route of Application: Intraperitoneal  
Exposure Time: (10D PREG)  
Result: Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Specific Developmental Abnormalities: Craniofacial (including nose and tongue). Specific Developmental Abnormalities: Musculoskeletal system.

Species: Mouse  
Dose: 100 MG/KG  
Route of Application: Intraperitoneal  
Exposure Time: (10D PREG)  
Result: Effects on Embryo or Fetus: Fetal death.

## 12 - Ecological Information

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No data available.

## 13 - Disposal Considerations

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### SUBSTANCE DISPOSAL

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

## 14 - Transport Information

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### RID/ADR

UN#: 2811

Class: 6.1

PG: III

Proper Shipping Name: Toxic solid, organic, n.o.s.

### IMDG

UN#: 2811

Class: 6.1

PG: III

Proper Shipping Name: Toxic solid, organic, n.o.s.

Marine Pollutant: No

Severe Marine Pollutant: No

Technical Name: Required

### IATA

UN#: 2811

Class: 6.1

PG: III

Proper Shipping Name: Toxic solid, organic, n.o.s.

Inhalation Packing Group I: No

Technical Name: Required

## 15 - Regulatory Information

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### CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES

INDICATION OF DANGER: T

Toxic.

R-PHRASES: 25 43

Toxic if swallowed. May cause sensitization by skin contact.

S-PHRASES: 28 45 36/37

After contact with skin, wash immediately with plenty of water.

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Wear suitable protective clothing and gloves.

### COUNTRY SPECIFIC INFORMATION

#### Germany

WGK: 2

## 16 - Other Information

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### 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. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2005 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

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