

MATERIAL DATA SAFETY SHEET

AFLATOXIN B1

1 - Product and Company Information

Product Name: Aflatoxin B1 Date: 21st January 2019 Version: Discofinechem4
Company: Discovery Fine Chemicals Ltd
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2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Acute toxicity, Inhalation (Category 2)

Acute toxicity, Dermal (Category 1)

Acute toxicity, Oral (Category 1)

Carcinogenicity (Category 1B)

Classification according to EU Directives 67/548/EEC or 1999/45/EC

May cause cancer. May cause heritable genetic damage.

Very toxic by inhalation, in contact with skin and if swallowed.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008 [CLP]

Pictogram



Signal word: Danger

Hazard statement(s)

H300 Fatal if swallowed.

H310 Fatal in contact with skin.

H330 Fatal if inhaled.

H350 May cause cancer.

Precautionary statement(s)

P201 Obtain special instructions before use.

P260 Do not breathe dust.

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves/ protective clothing.

P284 Wear respiratory protection.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.

Restricted to professional users.

According to European Directive 67/548/EEC as amended.

Hazard symbol(s)



T+ Very toxic

R-phrases(s)

R45 May cause cancer.

R46 May cause heritable genetic damage.

R26/27/28 Also very toxic by inhalation, in contact with skin and if swallowed.

S-phrases(s)

S53 Avoid exposure - obtain special instructions before use.

S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S28 After contact with skin, wash immediately with plenty of water.

S36/37 Wear suitable protective clothing and gloves.

Restricted to professional users.

2.3 Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Synonyms: AFLATOXIN B(1),

2,3,6AA,9AA-TETRAHYDRO-4-METHOXYCYCLOPENTA[c]FURO[2',3':4,5]FURO[2,3-h]CHROMENE-1,11-DIONE

Formula: C₁₇H₁₂O₆ Molecular Weight: 312.27 g/mol

Component: **Aflatoxin B1**

Cas No: 1162-65-8 E.C.No: 214-603-3 Concentration: -

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice - Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled - If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact - Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed - To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

4.3 Indication of any immediate medical attention and special treatment needed - no data available

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media - Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture - Carbon oxides

5.3 Advice for firefighters - Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information - no data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas.

Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

6.2 Environmental precautions - Prevent further leakage or spillage if safe to do so.

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up - Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections - For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling - Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use.

Provide appropriate exhaust ventilation at places where dust is formed.

Normal measures for preventive fire protection.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: -20 °C. Light sensitive.

7.3 Specific end use(s) - no data available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls - Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal protective equipment

Eye/face protection - Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection - 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 EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatrill®

Splash protection

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatrill®

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

test method: EN374

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 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.

Body Protection - Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection - Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- a) Appearance - Form: powder, Colour: white – light yellow
- b) Odour - no data available
- c) Odour Threshold - no data available
- d) pH - no data available
- e) Melting point/freezing point - 268.0 - 269.0 °C
- 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 - no data available
- 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 - no data available
- t) Oxidizing properties - no data available

9.2 Other safety information - no data available

10. STABILITY AND REACTIVITY

10.1 Reactivity - no data available

10.2 Chemical stability - no data available

10.3 Possibility of hazardous reactions - no data available

10.4 Conditions to avoid - Light.

10.5 Incompatible materials - Strong oxidizing agents, Strong bases

10.6 Hazardous decomposition products - Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity - LD50 Oral - rat - 4.8 mg/kg

Skin corrosion/irritation - no data available

Serious eye damage/eye irritation - no data available

Respiratory or skin sensitization - no data available

Germ cell mutagenicity - no data available

Carcinogenicity - This is or contains a component that has been reported to be carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification.

Possible human carcinogen

IARC: 1 - Group 1: Carcinogenic to humans (Aflatoxin B1)

Reproductive toxicity - Damage to fetus possible

Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

Specific target organ toxicity - single exposure - no data available

Specific target organ toxicity - repeated exposure - no data available

Aspiration hazard - no data available

Potential health effects

Inhalation: May be fatal if inhaled. May cause respiratory tract irritation.

Ingestion: May be fatal if swallowed.

Skin: May be fatal if absorbed through skin. May cause skin irritation.

Eyes: May cause eye irritation.

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

Additional Information - RTECS: GY1925000

12. ECOLOGICAL INFORMATION

12.1 Toxicity - no data available

12.2 Persistence and degradability - no data available

12.3 Bio-accumulative potential - no data available

12.4 Mobility in soil - no data available

12.5 Results of PBT and vPvB assessment - no data available

12.6 Other adverse effects - no data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

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

Contaminated packaging - Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1 UN number - ADR/RID: 2811 IMDG: 2811 IATA: 2811

14.2 UN proper shipping name: ADR/RID: TOXIC SOLID, ORGANIC, N.O.S. (Aflatoxin B1)

IMDG: TOXIC SOLID, ORGANIC, N.O.S. (Aflatoxin B1); IATA: Toxic solid, organic, n.o.s. (Aflatoxin B1)

14.3 Transport hazard class(es) - ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1

14.4 Packaging group - ADR/RID: I IMDG: I IATA: I

14.5 Environmental hazards - ADR/RID: no IMDG Marine Pollutant: no IATA: no

14.6 Special precautions for user - no data available

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

no data available

15.2 Chemical Safety Assessment - no data available

16. OTHER INFORMATION

Further information

Text of H-code(s) and R-phrase(s) mentioned in Section 3

Acute Tox. Acute toxicity

Carc. Carcinogenicity

H300 Fatal if swallowed.

H310 Fatal in contact with skin.

H330 Fatal if inhaled.

H350 May cause cancer.

T+ Very toxic

R26/27/28 Very toxic by inhalation, in contact with skin and if swallowed.

R45 May cause cancer.

R46 May cause heritable genetic damage.

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.