

Safety Data Sheet

acc. to OSHA HCS

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Printing date 10/07/2016

Reviewed on 10/07/2016

Version number: 2

1 Identification

· **Product identifier**

· **Trade name:** Ochratoxin A BioChemica

· **Article number:** A7690

· **CAS Number:**

303-47-9

· **EC number:**

206-143-7

· **Application of the substance / the mixture**

For lab use only. Not for drug, household or other uses.

Laboratory chemical

· **Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

AppliChem GmbH

Ottoweg 4

D-64291 Darmstadt

Tel.: +49 (0)6151 93570

Fax.: +49 (0)6151 935711

msds@applichem.com

· **Information department:** Dept. Compliance

· **Emergency telephone number:** +49(0)6151 93570 (Inside normal business hours)

2 Hazard(s) identification

· **Classification of the substance or mixture**

Acute Tox. 2 H300 Fatal if swallowed.

Carc. 2 H351 Suspected of causing cancer.

· **Label elements**

· **GHS label elements**

The substance is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS06 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**

(R)-N-((5-chloro-3,4-dihydro-8-hydroxy-3-methyl-1-oxo-1H-benzo[c]pyran-7-yl)carbonyl)-3-phenylalanine

· **Hazard statements**

H300 Fatal if swallowed.

H351 Suspected of causing cancer.

· **Precautionary statements**

P281 Use personal protective equipment as required.

P264 Wash thoroughly after handling.

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

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US

Trade name: Ochratoxin A BioChemica

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- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**



- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Substances**
- **CAS No. Description**
303-47-9 (R)-N-((5-chloro-3,4-dihydro-8-hydroxy-3-methyl-1-oxo-1H-benzo[c]pyran-7-yl)carbonyl)-3-phenylalanine
- **Identification number(s)**
- **EC number:** 206-143-7

4 First-aid measures

- **Description of first aid measures**
- **General information:**
Immediately remove any clothing soiled by the product.
In case of irregular breathing or respiratory arrest provide artificial respiration.
Involve doctor immediately.
- **After inhalation:** Supply fresh air or oxygen; call for doctor.
- **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Do not induce vomiting; immediately call for medical help.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Nitrogen oxides (NO_x)
Hydrogen chloride (HCl)
CO, CO₂
- **Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

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· **Additional information**

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

Contain escaping vapours with water.

6 Accidental release measures

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

Avoid formation of dust.

Do not inhale dust.

Ensure adequate ventilation

· **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

· **Methods and material for containment and cleaning up:**

Pick up mechanically.

Clean up affected area.

Dispose of the collected material according to regulations.

· **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

· **Handling:**

· **Precautions for safe handling** Prevent formation of dust.

· **Information about protection against explosions and fires:** No special measures required.

· **Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **Requirements to be met by storerooms and receptacles:** No special requirements.

· **Information about storage in one common storage facility:** Not required.

· **Further information about storage conditions:**

Accessible for authorised persons only.

Keep container sealed.

· **Recommended storage temperature:** 2-8 °C

· **Storage class:** 6.1 B

· **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:** Not required.

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

· **Breathing equipment:**

Required when dusts are generated.

Short term filter device:

Filter P2

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· **Protection of hands:**



Protective gloves

*The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation*

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **For the permanent contact gloves made of the following materials are suitable:**

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.11 mm

Value for the permeation: Level ≥ 480 min

· **As protection from splashes gloves made of the following materials are suitable:**

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.11 mm

Value for the permeation: Level ≥ 480 min

· **Eye protection:** Safety glasses

· **Body protection:**

Use protective suit.

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled.

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Powder

Color: Light yellow

· **Odor:** -

· **pH-value:** Not applicable.

· **Change in condition**

Melting point/Melting range: 169 °C (336 °F)

Boiling point/Boiling range: Undetermined.

· **Flash point:** Not applicable.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits:**

Lower: Not determined.

Upper: Not determined.

· **Vapor pressure:** Not applicable.

· **Density:** Not determined.

· **Solubility in / Miscibility with**

Water: almost insoluble
Insoluble.

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- **Viscosity:**
 - Dynamic:** Not applicable.
 - Kinematic:** Not applicable.
- **Solvent content:**
 - Organic solvents:** 0.0 %
 - VOC content:** 0.0 g/l / 0.00 lb/gl
- **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** strong oxidants
- **Hazardous decomposition products:** In the event of fire: See chapter 5

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**

Components	Type	Value	Species
303-47-9 (R)-N-((5-chloro-3,4-dihydro-8-hydroxy-3-methyl-1-oxo-1H-benzo[c]pyran-7-yl)carbonyl)-3-phenylalanine			
Oral	LD50	20 mg/kg (rat)	

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

303-47-9	(R)-N-((5-chloro-3,4-dihydro-8-hydroxy-3-methyl-1-oxo-1H-benzo[c]pyran-7-yl)carbonyl)-3-phenylalanine	2B
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- **NTP (National Toxicology Program)**

303-47-9	(R)-N-((5-chloro-3,4-dihydro-8-hydroxy-3-methyl-1-oxo-1H-benzo[c]pyran-7-yl)carbonyl)-3-phenylalanine	R
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- **OSHA-Ca (Occupational Safety & Health Administration)**

Substance is not listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** Quantitative data on the ecological effect of the product are not available.
- **Persistence and degradability** no data
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.

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- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Chemicals must be disposed of in compliance with the respective national regulations.
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:**
Disposal must be made according to official regulations.
Packagings that cannot be cleansed are to be disposed of in the same manner as the product.

14 Transport information

- | | |
|---|--|
| · UN-Number | UN3462 |
| · DOT, ADR, IMDG, IATA | |
| · UN proper shipping name | Toxins, extracted from living sources, solid, n.o.s. ((R)-N-((5-chloro-3,4-dihydro-8-hydroxy-3-methyl-1-oxo-1H-benzo[c]pyran-7-yl)carbonyl)-3-phenylalanine) |
| · DOT, ADR | |
| · IMDG, IATA | TOXINS, EXTRACTED FROM LIVING SOURCES, SOLID, N.O.S. ((R)-N-((5-chloro-3,4-dihydro-8-hydroxy-3-methyl-1-oxo-1H-benzo[c]pyran-7-yl)carbonyl)-3-phenylalanine) |
| · Transport hazard class(es) | |
| · DOT | |
|  | |
| · Class | 6.1 Toxic substances |
| · Label | 6.1 |
| · ADR, IMDG, IATA | |
|  | |
| · Class | 6.1 Toxic substances |
| · Label | 6.1 |
| · Packing group | |
| · DOT, ADR, IMDG, IATA | II |
| · Environmental hazards: | |
| · Marine pollutant: | No |

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Trade name: Ochratoxin A BioChemica

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· Special precautions for user	Warning: Toxic substances
· EMS Number:	F-A,S-A
· Stowage Category	B
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Excepted quantities (EQ)	Code: E4 Maximum net quantity per inner packaging: 1 g Maximum net quantity per outer packaging: 500 g
· IMDG	
· Limited quantities (LQ)	500 g
· Excepted quantities (EQ)	Code: E4 Maximum net quantity per inner packaging: 1 g Maximum net quantity per outer packaging: 500 g
· UN "Model Regulation":	UN 3462 TOXINS, EXTRACTED FROM LIVING SOURCES, SOLID, N.O.S. ((R)-N-((5-CHLORO-3,4-DIHYDRO-8-HYDROXY-3-METHYL-1-OXO-1H-BENZO[C]PYRAN-7-YL)CARBONYL)-3-PHENYLALANINE), 6.1, II

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

- **Section 355 (extremely hazardous substances):**

Substance is not listed.

- **Section 313 (Specific toxic chemical listings):**

Substance is not listed.

- **TSCA (Toxic Substances Control Act):**

Substance is not listed.

- **Proposition 65**

- **Chemicals known to cause cancer:**

Substance is listed.

- **Chemicals known to cause reproductive toxicity for females:**

Substance is not listed.

- **Chemicals known to cause reproductive toxicity for males:**

Substance is not listed.

- **Chemicals known to cause developmental toxicity:**

Substance is not listed.

- **Carcinogenicity categories**

- **EPA (Environmental Protection Agency)**

Substance is not listed.

- **TLV (Threshold Limit Value established by ACGIH)**

Substance is not listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

Substance is not listed.

- **GHS label elements**

The substance is classified and labeled according to the Globally Harmonized System (GHS).

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Trade name: Ochratoxin A BioChemica

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· **Hazard pictograms**



GHS06 GHS08

· **Signal word** *Danger*

· **Hazard-determining components of labeling:**

(R)-N-((5-chloro-3,4-dihydro-8-hydroxy-3-methyl-1-oxo-1H-benzo[c]pyran-7-yl)carbonyl)-3-phenylalanine

· **Hazard statements**

H300 Fatal if swallowed.

H351 Suspected of causing cancer.

· **Precautionary statements**

P281 Use personal protective equipment as required.

P264 Wash thoroughly after handling.

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

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** Dept. Compliance

· **Contact:** Mr. Th. Stöckle

· **Date of preparation / last revision** 10/07/2016 / 1

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Acute Tox. 2: Acute toxicity – Category 2

Carc. 2: Carcinogenicity – Category 2