

Revision Date 03-Dec-2010

Revision Number 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier**

**Product Description:** Podophyllotoxin  
**Cat No.** 228410000; 228411000  
**Synonyms** Furo(3',4':6,7)naphtho(2,3-d)-1,3-dioxol-6(5ah)-one,5,8,8a,9-tetrahydro-9-hydroxy-5-(3,

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

**Recommended Use** Laboratory chemicals  
**Uses advised against** No Information available

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

**Company**

Acros Organics BVBA  
 Janssen Pharmaceuticaaan 3a  
 2440 Geel, Belgium

**E-mail address** begel.sdsdesk@thermofisher.com

**Emergency Telephone Number**

For information in the US, call: 800-ACROS-01  
 For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99  
 Emergency Number, US: 201-796-7100

CHEMTREC Phone Number, US: 800-424-9300  
 CHEMTREC Phone Number, Europe: 703-527-3887

## 2. HAZARDS IDENTIFICATION

**Classification of the substance or mixture**

**REGULATION (EC) No 1272/2008**

Acute oral toxicity	Category 3
Acute dermal toxicity	Category 3
Acute Inhalation Toxicity - Dusts and Mists	Category 3

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

For the full text of the R phrases mentioned in this Section, see Section 16

**Symbol(s)** T - Toxic  
**R -phrase(s)** none  
**Risk Combination Phrases** R23/25 - Toxic by inhalation and if swallowed

**Label Elements**

Podophyllotoxin

Revision Date 03-Dec-2010

**2. HAZARDS IDENTIFICATION**



**Signal Word**

**Danger**

**Hazard Statements**

H331 - Toxic if inhaled  
H311 - Toxic in contact with skin  
H301 - Toxic if swallowed

**Precautionary Statements - EU (§28, 1272/2008)**

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P312 - Call a POISON CENTER or doctor/physician if you feel unwell  
P302 + P350 - IF ON SKIN: Gently wash with plenty of soap and water  
P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

**Other Hazards**

No information available.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	EC No.	Weight %	CAS-No	Classification	GHSCLAS	REACH Reg. No.
1,3,3a,4,9,9a-Hexahydro-9-hydroxy-6,7-(methylenedioxy)-4-(3',4',5'-trimethoxyphenyl)benzofuran-3-one 518-28-5	EEC No. 208-250-4	95	518-28-5	T; R23/25	Acute Tox. 3 (H301) Acute Tox. 3 (H331)	-

**For the full text of the R phrases mentioned in this Section, see Section 16**

**4. FIRST AID MEASURES**

**Description of first aid measures**

**Eye Contact**

Immediate medical attention is required Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes

**Skin Contact**

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes Immediate medical attention is required

Podophyllotoxin

Revision Date 03-Dec-2010

<b>Ingestion</b>	Call a physician immediately Clean mouth with water
<b>Inhalation</b>	Remove from exposure, lie down Move to fresh air If breathing is difficult, give oxygen If not breathing, give artificial respiration Obtain medical attention
<b>Notes to Physician</b>	Treat symptomatically

## 5. FIRE-FIGHTING MEASURES

### Extinguishing media

#### **Suitable Extinguishing Media**

Water spray Carbon dioxide (CO<sub>2</sub>) Dry chemical chemical foam

#### **Extinguishing media which must not be used for safety reasons**

No information available.

### Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors

### Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

### Environmental precautions

Prevent further leakage or spillage if safe to do so

### Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable and closed containers for disposal. Sweep up or vacuum up spillage and collect in suitable container for disposal.

## 7. HANDLING AND STORAGE

### Precautions for Safe Handling

Do not breathe dust Do not breathe vapors or spray mist Do not get in eyes, on skin, or on clothing Use only in area provided with appropriate exhaust ventilation

### Conditions for safe storage, including any incompatibilities

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

### Specific End Uses

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Podophyllotoxin

Revision Date 03-Dec-2010

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Control parameters**
**Exposure limits**

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Derived No Effect Level (DNEL)**

No information available.

**Predicted No Effect Concentration (PNEC)**

No information available.

**Exposure controls**
**Engineering Measures**

Ensure adequate ventilation, especially in confined areas

**Personal protective equipment**
**Eye Protection**

Goggles

**Hand Protection**

Protective gloves

**Skin and body protection**

Wear appropriate protective gloves and clothing to prevent skin exposure

**Respiratory Protection**

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice

**Environmental exposure controls**

No information available.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State**

Powder, Solid

**Appearance**

Off-white

**odor**

odorless

**pH**

No information available.

**Vapor Pressure**

No information available.

**Vapor Density**

No information available.

**Boiling Point/Range**

No information available.

**Melting Point/Range**

178 - 184°C / 352.4 - 363.2°F

**Flash Point**

No information available.

**Molecular Formula**

C22 H22 O8

**Molecular Weight**

414.4

## 10. STABILITY AND REACTIVITY

**Reactivity**
**Chemical Stability**

Stable under normal conditions

**Possibility of Hazardous Reactions**
**Hazardous Polymerization**

No information available

**Hazardous Reactions .**

No information available.

**Conditions to Avoid**

Heat, flames and sparks

**Podophyllotoxin**

Revision Date 03-Dec-2010

**Incompatible Materials**

**Hazardous Decomposition Products**

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

**11. TOXICOLOGICAL INFORMATION**

**Information on Toxicological Effects**

**Acute Toxicity**

**Product Information** No acute toxicity information is available for this product

**Component Information**

**Component**

1,3,3a,4,9,9a-Hexahydro-9-hydroxy-6,7-(methylenedioxy)-4-(3',4',5'-trimethoxyphenyl)benz[f]isobenzofuran-3-one

LD50 Oral	LD50 Dermal	LC50 Inhalation
	200 mg/kg ( Rabbit ) 500 mg/kg ( Rat )	

**Chronic Toxicity**

**Carcinogenicity** There are no known carcinogenic chemicals in this product

**Sensitization**

No information available.

**Mutagenic Effects**

No information available

**Reproductive Effects**

No information available.

**Developmental Effects**

No information available.

**Target Organs**

No information available.

**Other Adverse Effects**

The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information

**Endocrine Disruptor Information**

None known

**12. ECOLOGICAL INFORMATION**

**Toxicity**

**Ecotoxicity effects**

Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants

**Persistence and degradability**

No information available

**Bioaccumulative potential**

Podophyllotoxin

Revision Date 03-Dec-2010

**12. ECOLOGICAL INFORMATION**

No information available.

**Mobility in soil**

No information available.

**Results of PBT and vPvB assessment**

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Waste from Residues / Unused Products**

Dispose of in accordance with local regulations

**Contaminated Packaging**

Empty containers should be taken for local recycling, recovery or waste disposal

**14. TRANSPORT INFORMATION**

**IMDG/IMO**

UN-No 2811  
 Hazard Class 6.1  
 Packing Group III  
 Proper Shipping Name TOXIC SOLID, ORGANIC, N.O.S.

**ADR**

UN-No 2811  
 Hazard Class 6.1  
 Packing Group III  
 Proper Shipping Name TOXIC SOLID, ORGANIC, N.O.S.

**IATA**

UN-No 2811  
 Hazard Class 6.1  
 Packing Group III  
 Proper Shipping Name TOXIC SOLID, ORGANIC, N.O.S.\*

**15. REGULATORY INFORMATION**

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

**International Inventories**

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
-----------	--------	--------	-----	------	-----	------	-------	------	-------	------	------

**Podophyllotoxin**

Revision Date 03-Dec-2010

1,3,3a,4,9,9a-Hexahydro-9-hydroxy-6,7-(methylenedioxy)-4-(3',4',5'-trimethoxyphenyl)benz[f]isobenzofuran-3-one	208-250-4	-			-	-	-	-	-	-	X	-
--	-----------	---	--	--	---	---	---	---	---	---	---	---

**Legend**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**EINECS/ELINCS** - European Inventory Lists

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**CHINA** - China Inventory of Existing Chemical Substances

**AICS** - Inventory of Chemical Substances

**KECL** - Existing and Evaluated Chemical Substances

**Chemical Safety Assessment**

**16. OTHER INFORMATION**

**Text of R phrases mentioned in Section 2-3**

R23/25 - Toxic by inhalation and if swallowed

Revision Date 03-Dec-2010

Revision Summary Not applicable

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

**Disclaimer**

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text

End of Safety Data Sheet