# **Material Safety Data Sheet**

Version 4.7 Revision Date 04/27/2012 Print Date 01/14/2014

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name (Z)-4-Hydroxytamoxifen

**Product Number** H7904 Brand Sigma

Supplier Sigma-Aldrich

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USA

+1 800-325-5832 Telephone Fax +1 800-325-5052 Emergency Phone # (For (314) 776-6555

both supplier and

manufacturer)

Preparation Information Sigma-Aldrich Corporation

Product Safety - Americas Region

1-800-521-8956

# 2. HAZARDS IDENTIFICATION

# **Emergency Overview**

# **OSHA Hazards**

Target Organ Effect, Toxic by inhalation., Harmful by ingestion., Harmful by skin absorption., Irritant, Teratogen

### **Target Organs**

Reproductive system., Central nervous system, Liver

#### **GHS Classification**

Acute toxicity, Inhalation (Category 4) Acute toxicity, Dermal (Category 4) Acute toxicity, Oral (Category 4) Reproductive toxicity (Category 2)

### GHS Label elements, including precautionary statements

Pictogram



Signal word Warning

Hazard statement(s)

H302 + H312 Harmful if swallowed or in contact with skin

H332 Harmful if inhaled.

H361 Suspected of damaging fertility or the unborn child.

Precautionary statement(s)

P280 Wear protective gloves/ protective clothing.

**HMIS Classification** 

Health hazard: 2 **Chronic Health Hazard:** Flammability: 0 Physical hazards: 0

**NFPA Rating** 

2 Health hazard:

Sigma - H7904 Page 1 of 6 Fire: 0 Reactivity Hazard: 0

### **Potential Health Effects**

InhalationSkinMay be harmful if inhaled. Causes respiratory tract irritation.May be harmful if absorbed through skin. Causes skin irritation.

**Eyes** Causes eye irritation.

**Ingestion** May be harmful if swallowed.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : (Z)-4-(1-[4-(Dimethylaminoethoxy)phenyl]-2-phenyl-1-butenyl)phenol

trans-4-Hydroxytamoxifen

Formula : C<sub>26</sub>H<sub>29</sub>NO<sub>2</sub> C<sub>26</sub>H<sub>29</sub>NO<sub>2</sub>

Molecular Weight : 387.51 g/mol

Component		Concentration
4-Hydroxytamoxifen		
CAS-No.	68047-06-3	-

#### 4. FIRST AID MEASURES

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### lf 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. 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.

# 5. FIREFIGHTING MEASURES

# Conditions of flammability

Not flammable or combustible.

#### Suitable extinguishing media

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

# Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

### **Hazardous combustion products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx)

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx)

### 6. ACCIDENTAL RELEASE MEASURES

# **Personal precautions**

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

# **Environmental precautions**

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

### 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.

Sigma - H7904 Page 2 of 6

### 7. HANDLING AND STORAGE

# Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

#### Conditions for safe storage

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

Recommended storage temperature: 2 - 8 °C

Keep in a dry place. Keep in a dry place.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

### Personal protective equipment

# **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).

# **Hand 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.

### Eye protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin and 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.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

#### **Appearance**

Form powder

Colour no data available

Safety data

pH no data available

Melting no data available

point/freezing point

Boiling point no data available
Flash point no data available
Ignition temperature no data available
Autoignition no data available

temperature

Lower explosion limit no data available
Upper explosion limit no data available
Vapour pressure no data available

Sigma - H7904 Page 3 of 6

Density no data available
Water solubility no data available
Partition coefficient: no data available

n-octanol/water

Relative vapour

density

no data available

Odour no data available
Odour Threshold no data available
Evaporation rate no data available

# 10. STABILITY AND REACTIVITY

# **Chemical stability**

Stable under recommended storage conditions.

# Possibility of hazardous reactions

no data available

#### Conditions to avoid

no data available

#### Materials to avoid

Oxidizing agents

# **Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx) Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx) Other decomposition products - no data available

# 11. TOXICOLOGICAL INFORMATION

#### **Acute toxicity**

#### Oral LD50

no data available

# **Inhalation LC50**

Irritating to respiratory system.

### **Dermal LD50**

# Other information on acute toxicity

no data available

#### 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

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a

Sigma - H7904 Page 4 of 6

known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by OSHA.

### Reproductive toxicity

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

# **Teratogenicity**

Suspected human reproductive toxicant

# Specific target organ toxicity - single exposure (Globally Harmonized System)

no data available

# Specific target organ toxicity - repeated exposure (Globally Harmonized System)

no data available

# **Aspiration hazard**

no data available

#### Potential health effects

**Inhalation** May be harmful if inhaled. Causes respiratory tract irritation.

**Ingestion** May be harmful if swallowed.

**Skin** May be harmful if absorbed through skin. Causes skin irritation.

**Eyes** Causes eye irritation.

# Signs and Symptoms of Exposure

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

### Synergistic effects

no data available

# Additional Information

RTECS: SL1210000

### 12. ECOLOGICAL INFORMATION

#### **Toxicity**

no data available

# Persistence and degradability

no data available

### Bioaccumulative potential

no data available

### Mobility in soil

no data available

# PBT and vPvB assessment

no data available

#### Other adverse effects

no data available

### 13. DISPOSAL CONSIDERATIONS

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

# Contaminated packaging

Dispose of as unused product.

### 14. TRANSPORT INFORMATION

# DOT (US)

Not dangerous goods

#### **IMDG**

Not dangerous goods

#### **IATA**

Not dangerous goods

### 15. REGULATORY INFORMATION

#### **OSHA Hazards**

Target Organ Effect, Toxic by inhalation., Harmful by ingestion., Harmful by skin absorption., Irritant, Teratogen

# **SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

# **SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard

# **Massachusetts Right To Know Components**

No Components Listed

# Pennsylvania Right To Know Components

CAS-No. Revision Date

4-Hydroxytamoxifen

68047-06-3

Nevision Date

# **New Jersey Right To Know Components**

CAS-No.

**Revision Date** 

4-Hydroxytamoxifen

68047-06-3

# California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

# 16. OTHER INFORMATION

#### **Further information**

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Sigma - H7904 Page 6 of 6