# **SAFETY DATA SHEET**

Version 4.4 Revision Date 11/24/2017 Print Date 11/12/2018

# 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name : Adrenosterone

Product Number : 284998 Brand : Aldrich

CAS-No. : 382-45-6

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

Identified uses : Laboratory chemicals, Synthesis of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich

3050 Spruce Street SAINT LOUIS MO 63103

**USA** 

Telephone : +1 800-325-5832 Fax : +1 800-325-5052

1.4 Emergency telephone number

Emergency Phone # : +1-703-527-3887 (CHEMTREC)

#### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

Not a hazardous substance or mixture.

2.2 GHS Label elements, including precautionary statements

Not a hazardous substance or mixture.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Synonyms : Androst-4-ene-3,11,17-trione

11-Ketoandrostenedione Reichstein's substance G 4-Androstene-3,11,17-trione

Formula : C<sub>19</sub>H<sub>24</sub>O<sub>3</sub>

Molecular weight : 300.39 g/mol

CAS-No. : 382-45-6

EC-No. : 206-843-2

No components need to be disclosed according to the applicable regulations.

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#### 4. FIRST AID MEASURES

#### 4.1 Description of first aid measures

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

#### In case of skin contact

Wash off with soap and plenty of water.

#### 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.

## 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

# 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

No data available

#### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### 5.4 Further information

No data available

# 6. ACCIDENTAL RELEASE MEASURES

# 6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing vapours, mist or gas.

For personal protection see section 8.

# 6.2 Environmental precautions

No special environmental precautions required.

## 6.3 Methods and materials for containment and cleaning up

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

Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

# 7.2 Conditions for safe storage, including any incompatibilities

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

Keep in a dry place.

Storage class (TRGS 510): 13: Non Combustible Solids

#### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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#### 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

General industrial hygiene practice.

# Personal protective equipment

# Eye/face protection

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.

#### **Body Protection**

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

## Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Control of environmental exposure

No special environmental precautions required.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

boiling range

# 9.1 Information on basic physical and chemical properties

a)	Appearance	Form: powder
		Colour: brown

b) Odourc) Odour Thresholdd) pHNo data availableNo data available

e) Melting point/freezing Melting point/range: 219 - 222 °C (426 - 432 °F) - lit. point

f) Initial boiling point and 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 No data available flammability or

explosive limits

k) Vapour pressure

No data available

Vapour density

No data available

I) Vapour density No data available
 m) Relative density No data available
 n) Water solubility No data available
 o) Partition coefficient: n- No data available

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octanol/water

p) Auto-ignition No data available temperature

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

Stable under recommended storage conditions.

## 10.3 Possibility of hazardous reactions

No data available

## 10.4 Conditions to avoid

No data available

#### 10.5 Incompatible materials

Strong acids, Strong bases

#### 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - No data available

In the event of fire: see section 5

#### 11. TOXICOLOGICAL INFORMATION

# 11.1 Information on toxicological effects

# **Acute toxicity**

No data available

Inhalation: No data available Dermal: No data available

No data available

## Skin corrosion/irritation

No data available

# Serious eye damage/eye irritation

No data available

#### Respiratory or skin sensitisation

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.

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

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

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carcinogen or potential carcinogen by OSHA.

# Reproductive toxicity

No data available

No data available

#### Specific target organ toxicity - single exposure

No data available

## Specific target organ toxicity - repeated exposure

No data available

# **Aspiration hazard**

No data available

# **Additional Information**

RTECS: Not available

Some steroids show carcinogenic and teratogenic activity.

#### 12. ECOLOGICAL INFORMATION

#### 12.1 Toxicity

No data available

# 12.2 Persistence and degradability

No data available

# 12.3 Bioaccumulative potential

No data available

# 12.4 Mobility in soil

No data available

#### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

#### 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.

#### 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

#### **SARA 302 Components**

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

# **SARA 313 Components**

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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

No SARA Hazards

# **Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

No components are subject to the Massachusetts Right to Know Act.

# Pennsylvania Right To Know Components

Tellisylvania ragne to raiow components	CAS-No.	Revision Date
Androst-4-ene-3,11,17-trione	382-45-6	2009-07-17
Androst-4-ene-5, 11, 17-thone	302-43-0	2003-07-17
	CAS-No.	Revision Date
Androst-4-ene-3,11,17-trione	382-45-6	2009-07-17
	CAS-No.	Revision Date
Androst-4-ene-3,11,17-trione	382-45-6	2009-07-17
Androst-4-ene-5, 11, 17-thone	302-43-0	2003-01-11
New Jersey Right To Know Components		
	CAS-No.	Revision Date
Androst-4-ene-3,11,17-trione	382-45-6	2009-07-17
	CAS-No.	Revision Date
Androst-4-ene-3,11,17-trione	382-45-6	2009-07-17
Androst-4-ene-3, 11, 17-thone	302-45-0	2009-07-17
California Prop. 65 Components		
WARNING: This product contains a chemical known to the	CAS-No.	Revision Date
State of California to cause birth defects or other reproductive	382-45-6	2012-03-16
harm.		
Androst-4-ene-3,11,17-trione		
7 11 10 10 11 11 11 11 11 11 11 11 11 11		

# **16. OTHER INFORMATION**

# **HMIS Rating**

Health hazard: 0
Chronic Health Hazard:
Flammability: 0
Physical Hazard 0

#### **NFPA Rating**

Health hazard: 0
Fire Hazard: 0
Reactivity Hazard: 0

## **Further information**

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Preparation Information Sigma-Aldrich Corporation Product Safety – Americas Region 1-800-521-8956

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