# SIGMA-ALDRICH

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SAFETY DATA SHEET

Version 4.5 Revision Date 10/12/2016 Print Date 11/13/2018

1. PF	RODUCT AND COMPANY IDEN	ITIFICATION		
1.1	Product identifiers Product name :	- Formanten a		
		Formestane		
	Product Number :	F2552		
	Brand :	Sigma		
	CAS-No. :	566-48-3		
1.2 Relevant identified uses of the substance or mixture and uses advised		he substance or mixture and uses advised against		
	Identified uses :	Laboratory chemicals, Synthesis of substances		
1.3	Details of the supplier of the	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 numb			
	Emergency Phone # :	+1-703-527-3887 (CHEMTREC)		
2. HA	ZARDS IDENTIFICATION			
2.1 Classification of the substance or mixture		nce or mixture		
	GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) Reproductive toxicity (Category 1B), H360			
	For the full text of the H-Statements mentioned in this Section, see Section 16.			
2.2	GHS Label elements, including precautionary statements			
	Pictogram			
	Signal word	Danger		
	Hazard statement(s) H360	May damage fertility or the unborn child.		

Precautionary statement(s)	Obtain special instructions before use.
P201	Do not handle until all safety precautions have been read and
P202	understood.
P281	Use personal protective equipment as required.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

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

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

Synonyms	:	4-Hydroxyandrost-4-ene CGP-32349	-3,17-dione
Formula Molecular weight CAS-No.	: : :	C <sub>19</sub> H <sub>26</sub> O <sub>3</sub> 302.41 g/mol 566-48-3	
Hazardous components			
Component			Classification

	4-Androsten-4-ol-3,17-dione		
		Repr. 1B; H360	<= 100 %
For the full text of the H-Statements mentioned in this Section, see Section 16.			

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. Move out of dangerous area.

#### 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. 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

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

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

# 6.2 Environmental precautions

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

Sigma - F2552

Concentration

# 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 formation of dust and aerosols. 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.

Recommended storage temperature 2 - 8 °C

**7.3** Specific end use(s) Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

# 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

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

#### Personal protective equipment

#### Eye/face 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 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**

Impervious clothing, 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).

#### Control of environmental exposure

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

# 9. PHYSICAL AND CHEMICAL PROPERTIES

# 9.1 Information on basic physical and chemical properties

- a) Appearance Form: solid
- b) Odour No data available
- c) Odour Threshold No data available
- d) pH No data available

e)	Melting point/freezing point	No data available
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
I)	Vapour density	No data available
m)	Relative density	No data available
n)	Water solubility	No data available
n) o)	Water solubility Partition coefficient: n- octanol/water	No data available No data available
,	Partition coefficient: n-	
0)	Partition coefficient: n- octanol/water Auto-ignition	No data available
o) p)	Partition coefficient: n- octanol/water Auto-ignition temperature Decomposition	No data available No data available
o) p) q)	Partition coefficient: n- octanol/water Auto-ignition temperature Decomposition temperature	No data available No data available No data available
o) p) q) r)	Partition coefficient: n- octanol/water Auto-ignition temperature Decomposition temperature Viscosity	No data available No data available No data available 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 oxidizing agents
- 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.
- 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 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**

Presumed human reproductive toxicant

Reproductive toxicity - Rat - Intramuscular Effects on Fertility: Pre-implantation mortality (e.g., reduction in number of implants per female; total number of implants per corpora lutea).

Reproductive toxicity - Rat - Subcutaneous Maternal Effects: Parturition.

Reproductive toxicity - Rat - Subcutaneous Effects on Newborn: Behavioral.

May cause reproductive disorders.

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: BV8152500

# **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. 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

#### ΙΑΤΑ

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

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 Chronic Health Hazard

### Massachusetts Right To Know Components No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components		
4-Androsten-4-ol-3,17-dione	CAS-No. 566-48-3	Revision Date
,	500-40-5	
New Jersey Right To Know Components	CAS-No.	Revision Date
4-Androsten-4-ol-3,17-dione	566-48-3	Revision Date

#### 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**

#### Full text of H-Statements referred to under sections 2 and 3.

H360	May damage fertility or the unborn child.
Repr.	Reproductive toxicity

# HMIS Rating

Health hazard:	0
Chronic Health Hazard:	*

Flammability: Physical Hazard	0 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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