# SAFETY DATA SHEET

Version 5.2 Revision Date 06/29/2014 Print Date 11/07/2018

## 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name : Clobetasol propionate

Product Number : C8037

Brand : Sigma-Aldrich

CAS-No. : 25122-46-7

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

Identified uses : Laboratory chemicals, Manufacture 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

## GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Reproductive toxicity (Category 1B), H360

Specific target organ toxicity - repeated exposure (Category 2), Adrenal gland, Immune system, H373

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 2.2 GHS Label elements, including precautionary statements

Pictogram

**③** 

Signal word Danger

Hazard statement(s)

H360 May damage fertility or the unborn child.

H373 May cause damage to organs (Adrenal gland, Immune system) through

prolonged or repeated exposure.

Precautionary statement(s)

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and

understood.

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
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.

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

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

Formula : C<sub>25</sub>H<sub>32</sub>CIFO<sub>5</sub>

Molecular Weight : 466.97 g/mol

CAS-No. : 25122-46-7

EC-No. : 246-634-3

## **Hazardous components**

Component	Classification	Concentration
21-Chloro-9-fluoro-11β,17-dihydroxy-16β-methylpregna-1,4-diene-3,20-dione 17-propionate		
	Repr. 1B; STOT RE 2; H36	0, -
	H373	

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

Carbon oxides, Hydrogen chloride gas, Hydrogen fluoride

## 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting 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. Discharge into the environment must be avoided.

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#### 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 contact with skin and eyes. 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

Light sensitive.

## 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**

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.

## 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. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

## 9.1 Information on basic physical and chemical properties

a) Appearance Form: solid

b) Odour no data available

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c) Odour Threshold no data availabled) pH no data available

e) Melting point/freezing

point

Melting point/freezing point: 195 °C (383 °F)

 f) Initial boiling point and boiling range no data available

g) Flash point no data availableh) Evapouration rate no data availablei) Flammability (solid, gas) no data available

j) Upper/lower flammability or explosive limits no data available

k) Vapour pressure no data availablel) Vapour density no data availablem) Relative density no data available

n) Water solubility 0.002 g/l - slightly soluble

o) Partition coefficient: noctanol/water log Pow: 3.49

p) Auto-ignition temperature

no data available

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

Light.

## 10.5 Incompatible materials

Bases, Strong oxidizing agents

## 10.6 Hazardous decomposition products

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**

LD50 Oral - rat - > 2,000 mg/kg

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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

Laboratory experiments have shown teratogenic effects. Presumed human reproductive toxicant May damage the unborn child. Suspected of damaging fertility.

Reproductive toxicity - rat - Subcutaneous

Maternal Effects: Parturition. Effects on Newborn: Live birth index (# fetuses per litter; measured after birth). Effects on Newborn: Other neonatal measures or effects.

Suspected human reproductive toxicant

## Specific target organ toxicity - single exposure

no data available

## Specific target organ toxicity - repeated exposure

May cause damage to organs through prolonged or repeated exposure. - Adrenal gland, Immune system

#### **Aspiration hazard**

no data available

## **Additional Information**

RTECS: TU3725000

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

## 12. ECOLOGICAL INFORMATION

## 12.1 Toxicity

Toxicity to fish EC50 - Oncorhynchus mykiss (rainbow trout) - > 0.75 mg/l - 96 h

Toxicity to daphnia and

other aquatic invertebrates

EC50 - Daphnia magna (Water flea) - > 1.4 mg/l - 48 h

NOEC - Daphnia magna (Water flea) - 1.4 mg/l - 48 h

Toxicity to algae IC50 - SELENASTRUM - > 4.2 mg/l - 72 h

NOEC - SELENASTRUM - 1.3 mg/l - 72 h

Toxicity to bacteria Respiration inhibition IC50 - other microorganisms - > 100 mg/l - 3 h

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#### 12.2 Persistence and degradability

Biodegradability Zahn-Wellens Test - Exposure time 14 d

Result: < 5 % - According to the results of tests of biodegradability this product

is not readily biodegradable.

#### 12.3 Bioaccumulative potential

no data available

## 12.4 Mobility in soil

no data available

#### Results of PBT and vPvB assessment 12 5

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

#### 12.6 Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

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. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

## 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

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 are subject to the Massachusetts Right to Know Act.

# Pennsylvania Right To Know Components

CAS-No. **Revision Date** 25122-46-7

21-Chloro-9-fluoro-11β,17-dihydroxy-16β-methylpregna-1,4-

diene-3,20-dione 17-propionate

## **New Jersey Right To Know Components**

CAS-No. **Revision Date** 25122-46-7

21-Chloro-9-fluoro-11β,17-dihydroxy-16β-methylpregna-1,4-

diene-3,20-dione 17-propionate

## California Prop. 65 Components

Sigma-Aldrich - C8037 Page 6 of 7 WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

CAS-No. 25122-46-7 Revision Date 1998-05-15

21-Chloro-9-fluoro-11 $\beta$ ,17-dihydroxy-16 $\beta$ -methylpregna-1,4-diene-3,20-dione 17-propionate

## 16. OTHER INFORMATION

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

H360 May damage fertility or the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

Repr. Reproductive toxicity

STOT RE Specific target organ toxicity - repeated exposure

**HMIS Rating** 

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

**NFPA Rating** 

Health hazard: 2
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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