SIGMA-ALDRICH

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SAFETY DATA SHEET

Version 5.2 Revision Date 07/03/2014 Print Date 03/10/2015

| 1. | PRODUCT | AND | COMPANY | IDENTIFICATION | |
|----|---------|-----|---------|----------------|--|
|----|---------|-----|---------|----------------|--|

| 1.1 | Product identifiers Product name | : | 17α-Hydroxyprogesterone |
|---|--|-----|--|
| | Product Number Brand | : | H5752 Sigma |
| | CAS-No. | : | 68-96-2 |
| 1.2 Relevant identified uses of the substance or mixture and uses advised a | | | e substance or mixture and uses advised against |
| | Identified uses | : | Laboratory chemicals, Manufacture of substances |
| 1.3 | 1.3 Details of the supplier of the safety data sheet | | |
| | Company | : | Sigma-Aldrich 3050 Spruce Street SAINT LOUIS MO 63103 USA |
| | Telephone Fax | : | +1 800-325-5832 +1 800-325-5052 |
| 1.4 | Emergency telephone nur | nbe | Pr |

1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

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

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) P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and 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-Pregnen-17α-ol-3,20-dione |
|----------|---|-----------------------------------|
| | | 17α-Hydroxy-4-pregnene-3,20-dione |

| Formula | : C ₂₁ H ₃₀ O ₃ | |
|------------------|--|--|
| Molecular Weight | : 330.46 g/mol | |
| CAS-No. | : 68-96-2 | |
| EC-No. | : 200-699-4 | |

No ingredients are hazardous according to OSHA criteria. No components need to be disclosed according to the applicable regulations. 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.

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

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.

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 Normal me

Provide appropriate exhaust ventilation at places where dust is formed.Normal measures for preventive fire protection. 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.

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

| i | a) | Appearance | Form: solid |
|---|----|---|--|
| I | b) | Odour | no data available |
| | c) | Odour Threshold | no data available |
| (| d) | рН | no data available |
| (| e) | Melting point/freezing point | Melting point/range: 219 - 220 °C (426 - 428 °F) |
| 1 | f) | Initial boiling point and boiling range | no data available |
| 9 | g) | Flash point | no data available |
| I | h) | Evapouration 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 | | | | |
| o) | Partition coefficient: n- octanol/water | no data available | | | | |
| 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 | | | | |
| Oth | Other safety information | | | | | |

10. STABILITY AND REACTIVITY

no data available

10.1 Reactivity no data available

9.2

- **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
- **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 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

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: TU5060000

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

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

ΙΑΤΑ

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

No SARA Hazards

Massachusetts Right To Know Components

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

Pennsylvania Right To Know ComponentsCAS-No.Revision DateHydroxyprogesterone68-96-2Revision DateNew Jersey Right To Know ComponentsCAS-No.Revision DateHydroxyprogesterone68-96-2Revision 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.

| | ., |
|-----------------------|----|
| HMIS Rating | |
| Health hazard: | 0 |
| Chronic Health Hazard | d: |
| Flammability: | 0 |
| Physical Hazard | 0 |
| NFPA Rating | |
| Health hazard: | 0 |
| Fire Hazard: | 0 |

Fire Hazard:0Reactivity 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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