

## Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)  
Classifications according to Regulation (EC) No 1272/2008.  
Printdate 26 Jun 2023

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product name:

Dehydroepiandrosterone

### 1.1. Catalog No.:

673012

### 1.2. Relevant identified uses of the substance or mixture

Identified: Laboratory chemical  
uses: R&D

### 1.3. Uses advised against:

HPC Standards GmbH  
Am Wieseneck 7

04451 Cunnersdorf  
Deutschland

Tel. +49 34291 3372-36  
Fax. +49 34291 3372-39  
contact@hpc-standards.com

### 1.4. Emergency telephone number

HPC Standards Tel. +49 34291 3372-36  
This number is only available during office hours.

## 2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture  
Regulation (EC) No 1272/2008  
Reproductive toxicity Category 1B - (H360)  
Effects on or via lactation Yes - (H362)  
Acute aquatic toxicity Category 1 - (H400)  
Chronic aquatic toxicity Category 1 - (H410)

### 2.2. Label elements

#### 2.2.1. Pictogram



#### 2.2.2.

Contains Dehydroepiandrosterone (DHEA)  
Signal word  
Danger

**Hazard statements**

H360 - May damage fertility or the unborn child  
H362 - May cause harm to breast-fed children  
H410 - Very toxic to aquatic life with long lasting effects  
Precautionary Statements - EU (§28, 1272/2008)  
P201 - Obtain special instructions before use  
P260 - Do not breathe dust/fume/gas/mist/vapours/spray  
P263 - Avoid contact during pregnancy and while nursing  
P273 - Avoid release to the environment  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P308 + P313 - IF exposed or concerned: Get medical advice/attention  
P391 - Collect spillage

**2.3. Other hazards**

No information available.

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

Chemical name: Dehydroepiandrosterone (DHEA)

EU - REACH (1907/2006) - Article 59(1)

- Candidate List of Substances of Very

High Concern (SVHC) for Authorisation: -

EU - REACH (1907/2006) - Endocrine

Disruptor Assessment List of

Substances: -

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

Chemical name: Dehydroepiandrosterone (DHEA) 53-43-0

Weight-%: 100

REACH registration number: -

EC No: 200-175-5

Classification according to Regulation (EC) No. 1272/2008 [CLP]: Repr. 1B (H360) Lact. (H362) Aquatic Acute 1 (H400)

Aquatic Chronic 1 (H410)

Specific concentration limit (SCL): -

M-Factor: -

M-Factor (long-term): -

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATE<sub>mix</sub>) for classifying a mixture based on its components

Chemical name: Dehydroepiandrosterone (DHEA) 53-43-0

Oral LD50 mg/kg: 10000

Dermal LD50 mg/kg: No data available

Inhalation LC50 - 4 hour - dust/mist - mg/L: No data available

Inhalation LC50 - 4 hour - vapour - mg/L: No data available

Inhalation LC50 - 4 hour - gas - ppm: No data available

This product does not contain candidate substances of very high concern at a concentration  $\geq 0.1\%$  (Regulation (EC) No. 1907/2006 (REACH), Article 59)

#### 3.1.1. Formula

C<sub>19</sub>H<sub>28</sub>O<sub>2</sub>

### 3.1.2. Molecular Weight (g/mol)

288.42

### 3.1.3. CAS-No.

53-43-0

## 4. FIRST AID MEASURES

### 4.1. Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance.

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor.

Skin contact Wash skin with soap and water. In the case of skin irritation or allergic reactions see a doctor.

Ingestion Rinse mouth.

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

Symptoms No information available.

### 4.3. Indication of any immediate medical attention and special treatment needed

Note to doctors Treat symptomatically

## 5. FIRE-FIGHTING MEASURES

### 5.1. Extinguishing media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

### 5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical

No information available.

### 5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

## 6. ACCIDENTAL RELEASE MEASURES

**6.1. Personal precautions, protective equipment and emergency procedures**

Personal precautions Ensure adequate ventilation.

For emergency responders Use personal protection recommended in Section 8.

**6.2. Environmental precautions**

Environmental precautions See Section 12 for additional Ecological Information.

**6.3. Methods and material for containment and cleaning up**

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

**6.4. Reference to other sections**

Reference to other sections See section 8 for more information. See section 13 for more information.

## 7. HANDLING AND STORAGE

**7.1. Precautions for safe handling**

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes.

General hygiene considerations Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Wear suitable gloves and eye/face protection. Wash hands before breaks and immediately after handling the product.

**7.2. Conditions for safe storage, including any incompatibilities**

Storage Conditions Please refer to the manufacturers certificate for specific storage and transport temperature conditions. Store only in the original receptacle unless other advice is given on the CoA.

**7.3. Specific end use(s)**

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1. Control parameters**

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration (PNEC)

No information available.

**8.2. Exposure controls**

Personal protective equipment

Eye/face protection Avoid contact with eyes. Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves. The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374. Wear protective nitrile rubber gloves

Gloves:

PPE - Glove material: Wear protective nitrile rubber gloves

Glove thickness: 0,11mm

Break through time: 480 minutes

Skin and body protection Wear suitable protective clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Wear suitable gloves and eye/face protection. Wash hands before breaks and immediately after handling the product.

Environmental exposure controls Do not allow into any sewer, on the ground or into any body of water.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties  
Physical state Solid  
Appearance Solid  
Colour white  
Odour Odourless.  
Odour threshold No information available  
Property Values Remarks o Method  
Melting point / freezing point 147 - 152 °C None known  
Initial boiling point and boiling range No data available None known  
Flammability No data available None known  
Flammability Limit in Air None known  
Upper flammability or explosive limits  
No data available  
Lower flammability or explosive limits  
No data available  
Flash point No data available None known  
Autoignition temperature No data available None known  
Decomposition temperature None known  
pH No data available None known  
pH (as aqueous solution) No data available No information available  
Kinematic viscosity No data available None known  
Dynamic viscosity No data available None known  
Water solubility No data available 0.017 g/l at 20 °C None known  
Solubility(ies) Methanol, Acetonitrile, Ethanol, slightly soluble  
Partition coefficient 3.03 None known  
Vapour pressure < 1 hPa at 25 °C None known  
Relative density 1.159 None known  
Bulk density No data available  
Liquid Density No data available  
Relative vapour density No data available None known  
Particle characteristics  
Particle Size No information available  
Particle Size Distribution No information available  
9.2. Other information  
Molecular weight 288.43  
Molecular formula C<sub>19</sub> H<sub>28</sub> O<sub>2</sub>  
9.2.1. Information with regards to physical hazard classes  
Not applicable  
9.2.2. Other safety characteristics  
No information available

## 10. STABILITY AND REACTIVITY

10.1. Reactivity  
Reactivity No information available.  
10.2. Chemical stability  
Stability Stable under normal conditions.  
Explosion data  
Sensitivity to mechanical impact None.  
Sensitivity to static discharge None.  
10.3. Possibility of hazardous reactions  
Possibility of hazardous reactions None under normal processing.  
10.4. Conditions to avoid  
Conditions to avoid None known based on information supplied.  
10.5. Incompatible materials  
Incompatible materials None known based on information supplied.  
Hazardous decomposition products None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available.

Eye contact Specific test data for the substance or mixture is not available.

Skin contact Specific test data for the substance or mixture is not available.

Ingestion Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Numerical measures of toxicity

Acute toxicity

Component Information

Chemical name: Dehydroepiandrosterone (DHEA)

Oral LD50: > 10 g/kg ( Rat )

Dermal LD50: -

Inhalation LC50: -

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitisation No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity Contains a known or suspected reproductive toxin. Classification based on data available for ingredients. May damage fertility or the unborn child. May cause harm to breast-fed children.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties No information available.

11.2.2. Other information

Other adverse effects No information available.

## 12. ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Chemical name: Dehydroepiandrosterone (DHEA)

Algae/aquatic plants: EC50: = 0.01 mg/L (72h, *Desmodesmus subspicatus* )

Fish: -

Toxicity to microorganisms: -

Crustacea: EC50: = 5.4 mg/L (48h, *Daphnia magna* )

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation There is no data for this product.

Component Information

Chemical name: Dehydroepiandrosterone (DHEA)

Partition coefficient: 3.03

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment This substance is not considered to be persistent, bioaccumulating nor toxic (PBT). This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

12.6. Endocrine disrupting properties

Endocrine disrupting properties No information available.

12.7. Other adverse effects

No information available

### 13. DISPOSAL CONSIDERATIONS

#### 13.1. Waste treatment methods

Waste from residues/unused products

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

### 14. TRANSPORT INFORMATION

#### IATA

14.1 UN number or ID number UN3077

14.2 UN proper shipping name Environmentally hazardous substances, solid, n.o.s. (Dehydroepiandrosterone (DHEA))

14.3 Transport hazard class(es) 9

14.4 Packing group III

Description UN3077, Environmentally hazardous substances, solid, n.o.s. (Dehydroepiandrosterone (DHEA)), 9, III

14.5 Environmental hazards Yes

14.6 Special precautions for user

Special Provisions A97, A158, A179, A197, A215

ERG Code 9L

#### IMDG

14.1 UN number or ID number UN3077

14.2 UN proper shipping name Environmentally hazardous substances, solid, n.o.s. (Dehydroepiandrosterone (DHEA))

14.3 Transport hazard class(es) 9

14.4 Packing group III

Description UN3077, Environmentally hazardous substances, solid, n.o.s. (Dehydroepiandrosterone (DHEA)), 9, III, Marine pollutant

14.5 Marine pollutant P

Environmental hazards Yes

14.6 Special precautions for user

Special Provisions 274, 335, 966, 967, 969

EmS-No F-A, S-F No information available

14.7 Maritime transport in bulk

according to IMO instruments

No information available

#### RID

14.1 UN number or ID number UN3077

14.2 UN proper shipping name Environmentally hazardous substances, solid, n.o.s. (Dehydroepiandrosterone (DHEA))

14.3 Transport hazard class(es) 9

14.4 Packing group III

Description UN3077, Environmentally hazardous substances, solid, n.o.s. (Dehydroepiandrosterone (DHEA)), 9, III

14.5 Environmental hazards Yes

14.6 Special precautions for user

Special Provisions 274, 335, 375, 601

Classification code M7

#### ADR

14.1 UN number or ID number UN3077

14.2 UN proper shipping name Environmentally hazardous substances, solid, n.o.s. (Dehydroepiandrosterone (DHEA))

14.3 Transport hazard class(es) 9

14.4 Packing group III

Description UN3077, Environmentally hazardous substances, solid, n.o.s. (Dehydroepiandrosterone (DHEA)), 9, III, (-)

14.5 Environmental hazards Yes

14.6 Special precautions for user

Special Provisions 274, 335, 601, 375

Classification code M7

Tunnel restriction code (-)



## 15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture  
Water hazard class (WGK) strongly hazardous to water (WGK 3)

Poland SDS created according to the following Polish regulation: Act of February 25, 2011 on chemical substances and their mixtures (Journal of Laws of 2018, item 143, as amended). Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing the European Chemicals Agency (EC) as amended. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labeling and packaging of substances and mixtures, as amended. Regulation of the Minister of Health of 10 August 2012 on the criteria and method of classifying chemical substances and their mixtures (Journal of Laws of 2012, item 1018). Regulation of the Minister of Health of 20 April 2012 on labeling packaging of hazardous substances and mixtures and some mixtures (Journal of Laws of 2012, item 445). Regulation of the Minister of Family, Labor and Social Policy of 12 June 2018 on the maximum allowable concentrations and intensities of factors harmful to health in the work environment (Journal of Laws of 2018, item 1286). Announcement of the Minister of Economy, Labor and Social Policy of August 28, 2003 on the publication of the unified text of the Ordinance of the Minister of Labor and Social Policy on general health and safety at work regulations (Journal of Laws of 2003, No. 169, item 1650). Regulation of the Minister of Health of 30 December 2004 on occupational safety and health related to the presence of chemical agents in the workplace (Journal of Laws of 2005, No. 11, item 86). Act of December 14, 2012 on waste (Journal of Laws of 2013, item 21). Regulation of the Minister of Health of December 30, 2004 on occupational health and safety related to the presence of chemical agents in the workplace (Journal U. of 2005, No. 11, item 86). Waste Act of December 14, 2012 (Journal of Laws of 2013, item 21). Act of 13 June 2013 on the management of packaging and packaging waste, Journal of Laws 2013, item 888). Government statement of September 24, 2002 - European Agreement on the International Carriage of Dangerous Goods by Road (ADR) (Journal of Laws No. 194, item 1629 and Journal of Laws of 2003, No. 207, item 2013 and 2014).

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV)

This

product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

DIRECTIVE (EU) 2021/1187 on the marketing and use of explosives precursors

Not applicable

Persistent Organic Pollutants

Not applicable

Dangerous substance category per Seveso Directive (2012/18/EU)

E1 - Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

International Inventories

TSCA Complies under research and development exemption or is regulated by a different government agency.

DSL/NDL Contact supplier for inventory compliance status

EINECS/ELINCS Contact supplier for inventory compliance status

ENCS Contact supplier for inventory compliance status

IECSC Contact supplier for inventory compliance status

KECL Contact supplier for inventory compliance status

PICCS Contact supplier for inventory compliance status

AICS Contact supplier for inventory compliance status

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

Chemical Safety Report A Chemical Safety Assessment is not required for this substance



## 16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. For lab use only!