

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 14/01/2019 Revision date: : Version: 1.0

CLM-8015-0.1MG

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Substance

Substance name : DL-2-METHOXYESTRADIOL (13,14,15,16,17,18-13C6, 99%)

 CAS-No.
 : 362-07-2 (Unlabeled)

 Product code
 : CLM-8015-0.1MG

 Formula
 : *C6C13H26O3

Synonyms : 2,3,17β-Trihydroxy-1,3,5(10)-estratriene 2-methyl ether / 3,17β-Dihydroxy-2-methoxy-1,3,5(10)-

estratriene / 2-Hydroxyestradiol 2-methyl ether / 1,3,5(10)-Estratriene-2,3,17-triol 2-methyl

ether

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

1.2.1. Relevant identified uses

Main use category : Professional use

Industrial/Professional use spec : For professional use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Cambridge Isotope Laboratories, Inc.

50 Frontage Road Andover, MA 01810

USA

USA: 1-800-322-1174 Int: 1-978-749-8000 cilsales@isotope.com www.isotope.com

Emergency telephone number

Emergency numbers:

Chemtrec: 1-800-424-9300 (24 hours) International: 1-703-741-5970 (24 hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute Tox. 3 (Oral) H301 Acute Tox. 3 (Dermal) H311 Acute Tox. 3 (Inhalation) H331 Skin Irrit, 2 H315 Eye Irrit. 2 H319 Carc. 1A H350 Repr. 1A H360 STOT SE 3 H335 STOT RE 1 H372 Aquatic Chronic 1 H410

Full text of hazard classes and H-statements : see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

N; R51/53 T; R48/23/24/25 Xi; R36/37/38

Full text of R-phrases: see section 16

GHS-US classification

Acute Tox. 3 (Oral) H301 Acute Tox. 3 (Dermal) H311

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Acute Tox. 3 (Inhalation) H331
Skin Irrit. 2 H315
Eye Irrit. 2 H319
Carc. 1A H350
Repr. 1A H360
STOT SE 3 H335
STOT RE 1 H372
Aquatic Chronic 1 H410

Full text of H statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)

Precautionary statements (CLP)







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Signal word (CLP) : Danger

Hazard statements (CLP) : H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled

H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation

H350 - May cause cancer

H360 - May damage fertility or the unborn child

H372 - Causes damage to organs through prolonged or repeated exposure

H410 - Very toxic to aquatic life with long lasting effects
P260 - Do not breathe dust, fume, gas, mist, spray, vapors.
P264 - Wash hands, forearms and face thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.

P273 - Avoid release to the environment.

P280 - Wear protective gloves/protective clothing/eye protection/face protection. P301+P310 - IF SWALLOWED: Immediately call a doctor, a POISON CENTER.

P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

GHS-US labeling

Hazard pictograms (GHS-US)







Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled

H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation H350 - May cause cancer

H360 - May damage fertility or the unborn child

H372 - Causes damage to organs through prolonged or repeated exposure

H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (GHS-US) : 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, spray, vapors.
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.

P273 - Avoid release to the environment.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P301+P310 - If swallowed: Immediately call a doctor P302+P352 - If on skin: Wash with plenty of water

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing

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P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P308+P313 - If exposed or concerned: Get medical advice/attention.

P311 - Call a doctor

P312 - Call a doctor if you feel unwell

P314 - Get medical advice/attention if you feel unwell.

P321 - Specific treatment (see Hazardous component(s) for labeling on this label)

P322 - Specific treatment (see supplemental first aid instruction on this label)

P330 - Rinse mouth.

P332+P313 - If skin irritation occurs: Get medical advice/attention.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P361+P364 - Take off immediately all contaminated clothing and wash it before reuse.

P362+P364 - Take off contaminated clothing and wash it before reuse.

P391 - Collect spillage.

P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

P405 - Store locked up.

P501 - Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation

2.3. Other hazards

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Name	Product identifier	%	Classification according to Directive 67/548/EEC
DL-2-METHOXYESTRADIOL (13,14,15,16,17,18-13C6, 99%)	(CAS-No.) 362-07-2 (Unlabeled) (EC Index-No.)	100	N; R51/53 T; R48/23/24/25 Xi; R36/37/38
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
DL-2-METHOXYESTRADIOL (13,14,15,16,17,18-13C6, 99%)	(CAS-No.) 362-07-2 (Unlabeled) (EC Index-No.)	100	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Carc. 1A, H350 Repr. 1A, H360 STOT SE 3, H335 STOT RE 1, H372 Aquatic Chronic 1, H410

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

Name	Product identifier	%	GHS-US classification
DL-2-METHOXYESTRADIOL (13,14,15,16,17,18-13C6, 99%) (Main constituent)	(CAS-No.) 362-07-2 (Unlabeled)	100	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Carc. 1A, H350 Repr. 1A, H360 STOT SE 3, H335 STOT RE 1, H372 Aquatic Chronic 1, H410

Full text of H-phrases: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general

- : If you feel unwell, seek medical advice (show the label where possible). Evacuate danger area.
- First-aid measures after inhalation
- : When symptoms occur: go into open air and ventilate suspected area. If not breathing, give artificial respiration. Get medical advice/attention.

First-aid measures after skin contact

: Wash with plenty of soap and water. Get immediate medical advice/attention.

First-aid measures after eye contact

- : Rinse cautiously with water for several minutes.
- First-aid measures after ingestion
- : Never give anything by mouth to an unconscious person. Rinse mouth out with water. Get medical advice/attention.

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Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation : Toxic if inhaled. May cause respiratory irritation. Toxic in contact with skin. Causes skin irritation. Symptoms/effects after skin contact

Symptoms/effects after eye contact Causes serious eye irritation.

Symptoms/effects after ingestion Toxic if swallowed. Chronic symptoms : May cause cancer.

Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media : Water spray, dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).

Special hazards arising from the substance or mixture

No additional information available

Advice for firefighters

Firefighting instructions

: Fight fire with normal precautions from a reasonable distance. Wear a self contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory

Protection during firefighting

Do not enter fire area without proper protective equipment, including respiratory protection.

Wear recommended personal protective equipment.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Avoid breathing vapors, mist, gas. Avoid dust formation.

6.1.2. For emergency responders

Protective equipment Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

Environmental precautions

Prevent entry to sewers and public waters. Do not allow to enter drains or water courses. Avoid release to the environment.

Methods and material for containment and cleaning up

For containment : Take up mechanically (sweeping, shoveling) and collect in suitable container for disposal.

This material and its container must be disposed of in a safe way, and as per local legislation. Methods for cleaning up

Reference to other sections

For further information refer to section 13

SECTION 7: Handling and storage

Precautions for safe handling

: Provide adequate ventilation to minimize dust and/or vapor concentrations. Precautions for safe handling

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Handle in accordance with good industrial hygiene and safety

practice.

Conditions for safe storage, including any incompatibilities

Technical measures : Store in a well-ventilated place. Keep container tightly closed.

Store refrigerated (-5 °C to 5 °C). Protect from light. Storage conditions

Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

Control parameters

No additional information available

Exposure controls

Appropriate engineering controls : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work.

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Personal protective equipment : Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.









Materials for protective clothing : Wear suitable protective clothing and gloves. Hand protection Wear suitable protective clothing and gloves.

Eye protection Wear eye protection. Chemical goggles or face shield with safety glasses.

Skin and body protection Wear suitable protective clothing, gloves and eye/face protection.

: No data available

Respiratory protection In case of inadequate ventilation wear respiratory protection. Approved supplied air respirator.

Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties 9.1.

Physical state : Solid

: Crystalline solid Appearance 308.36 g/mol (Labeled) Molecular mass

Color

Odor No data available Odor threshold No data available рΗ No data available Relative evaporation rate (butyl acetate=1) No data available

: 189 - 190 °C °C (372 - 374 °F) Melting point

Freezing point : No data available : No data available **Boiling point** Flash point No data available No data available Auto-ignition temperature : No data available Decomposition temperature Flammability (solid, gas) No data available Vapor pressure No data available : No data available Relative vapor density at 20 °C : No data available Relative density : No data available Solubility Log Pow No data available Log Kow No data available : No data available Viscosity, kinematic No data available Viscosity, dynamic No data available Explosive properties : No data available Oxidizing properties

Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Explosion limits

No additional information available

Chemical stability

Five years after receipt if stored as stated in "Storage" section. Re-QC after 5 years.

Possibility of hazardous reactions

No additional information available

Conditions to avoid

No additional information available

Incompatible materials

Strong oxidizing agents.

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10.6. Hazardous decomposition products

Carbon oxides (CO, CO2).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Toxic if swallowed. Dermal: Toxic in contact with skin. Inhalation: Toxic if inhaled.

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DL-2-METHOXYESTRADIOL (13,14,15,16,17,18-13C6, 99%) (362-07-2 (Unlabeled))	
ATE CLP (oral)	100.000 mg/kg body weight
ATE CLP (dermal)	300.000 mg/kg body weight
ATE CLP (gases)	700.000 ppmV/4h
ATE CLP (vapors)	3.000 mg/l/4h
ATE CLP (dust, mist)	0.500 mg/l/4h

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : May cause cancer.

Reproductive toxicity : May damage fertility or the unborn child.

Specific target organ toxicity – single exposure : May cause respiratory irritation.

Specific target organ toxicity – repeated

exposure

: Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

Potential Adverse human health effects and

symptoms

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

Symptoms/effects after inhalation : Toxic if inhaled. May cause respiratory irritation. Symptoms/effects after skin contact : Toxic in contact with skin. Causes skin irritation.

Symptoms/effects after eye contact : Causes serious eye irritation.

Symptoms/effects after ingestion : Toxic if swallowed.
Chronic symptoms : May cause cancer.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Very toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Other adverse effects : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Waste materials should be disposed of under conditions which meet Federal, State, and local

environmental control regulations.

Product/Packaging disposal recommendations : Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed

professional waste disposal service to dispose of this material.

Ecology - waste materials : Dispose of as unused product.

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SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. **UN** number

DOT NA no. NA3077

14.2. **UN proper shipping name**

Proper Shipping Name (DOT) : Hazardous waste, solid, n.o.s.

Class (DOT) : 9 - Class 9 - Miscellaneous hazardous material 49 CFR 173.140

Hazard labels (DOT) 9 - Class 9 (Miscellaneous dangerous materials)



: D - Proper shipping name for domestic use only, or to and from Canada, G - Identifies PSN **DOT Symbols**

requiring a technical name

Packing group (DOT) : III - Minor Danger

DOT Special Provisions (49 CFR 172.102) B54 - Open-top, sift-proof rail cars are also authorized.

IB8 - Authorized IBCs: Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2); Fiberboard (11G); Wooden (11C, 11D and 11F); Flexible (13H1, 13H2, 13H3, 13H4, 13H5, 13L1, 13L2, 13L3, 13L4, 13M1 or 13M2).

IP2 - When IBCs other than metal or rigid plastics IBCs are used, they must be offered for

transportation in a closed freight container or a closed transport vehicle.

T1 - 1.5 178.274(d)(2) Normal...... 178.275(d)(2)

TP33 - The portable tank instruction assigned for this substance applies for granular and powdered solids and for solids which are filled and discharged at temperatures above their melting point which are cooled and transported as a solid mass. Solid substances transported or offered for transport above their melting point are authorized for transportation in portable tanks conforming to the provisions of portable tank instruction T4 for solid substances of packing group III or T7 for solid substances of packing group II, unless a tank with more stringent requirements for minimum shell thickness, maximum allowable working pressure, pressure-relief devices or bottom outlets are assigned in which case the more stringent tank instruction and special provisions shall apply. Filling limits must be in accordance with portable tank special provision TP3. Solids meeting the definition of an elevated temperature material must be transported in accordance with the applicable requirements of this subchapter.

DOT Packaging Exceptions (49 CFR 173.xxx) 155 : 213 DOT Packaging Non Bulk (49 CFR 173.xxx) DOT Packaging Bulk (49 CFR 173.xxx) : 240

Additional information

Emergency Response Guide (ERG) Number

Other information : No supplementary information available.

Special transport precautions : Not dangerous.

Overland transport

No additional information available

Transport by sea

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel.

Air transport

DOT Quantity Limitations Passenger aircraft/rail : No limit

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : No limit

CFR 175.75)

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14.4. Environmental hazards

Dangerous for the environment



Other information : No supplementary information available.

14.5. Special precautions for user

Special transport precautions : Not dangerous.

14.6. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

DL-2-METHOXYESTRADIOL (13,14,15,16,17,18	3-13C6, 99%) (362-07-2 (Unlabeled))
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.

15.2. International regulations

CANADA

DL-2-METHOXYESTRADIOL (13,14,15,16,17,18-13C6, 99%) (362-07-2 (Unlabeled))

Listed on the Canadian DSL (Domestic Substances List)

15.2.1. National regulations

No additional information available

15.3. US State regulations

DL-2-METHOXYESTRADIOL (13,14,15,16,17,18-13C	6, 99%)(362-07-2 (Unlabeled))
U.S California - Proposition 65 - Carcinogens List	No
U.S California - Proposition 65 - Developmental Toxicity	No
U.S California - Proposition 65 - Reproductive Toxicity - Female	No
U.S California - Proposition 65 - Reproductive Toxicity - Male	No
State or local regulations	U.S Pennsylvania - RTK (Right to Know) List U.S New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

Other information

: This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

Full text of R-, H- and EUH-phrases:

lext of K-, H- and EUH-prila	ises.
Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3	Acute toxicity (inhalation) Category 3
(Inhalation)	
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Carc. 1A	Carcinogenicity Category 1A
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Repr. 1A	Reproductive toxicity Category 1A

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Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H301	Toxic if swallowed
H311	Toxic in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H331	Toxic if inhaled
H335	May cause respiratory irritation
H350	May cause cancer
H360	May damage fertility or the unborn child
H372	Causes damage to organs through prolonged or repeated exposure
H410	Very toxic to aquatic life with long lasting effects
R36/37/38	Irritating to eyes, respiratory system and skin
R48/23/24/25	Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
N	Dangerous for the environment
Т	Toxic
Xi	Irritant

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

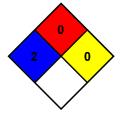
NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions,

including intrinsically noncombustible materials such as

concrete, stone, and sand.

NFPA reactivity : 0 - Material that in themselves are normally stable, even

under fire conditions.



Hazard Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 0 Minimal Hazard Physical : 0 Minimal Hazard

CIL Substance SDS

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