

**Section 1. Product and Company Identification**

Product Name Diethylstilbestrol
Product ID D3218
Chemical Name (Synonyms) Stilbestrol; DES; Apstil; Cyren A; Stilbetin
Supplier LKT Laboratories, Inc
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St. Paul, MN 55130 USA
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Emergency Phone # 1-800-424-9300

Section 2. Hazards Identification

GHS Classification Skin irritation (Category 2), H315
Eye irritation (Category 2A), H319
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335
Carcinogenicity (Category 1B), H350
Reproductive toxicity (Category 1B), H360
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

GHS Label elements including precautionary statements

Pictogram



Signal word Danger

Hazard and precautionary statements

Hazard statements

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.
H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements

P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P261 - Avoid breathing dust, fumes, gas, mist, vapors, and spray.
P264 - Wash skin thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, eye protection, and face protection.
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
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.
P321 - Specific treatment (see supplemental first aid instructions on this label).
P332 + P31 - If skin irritation occurs: Get medical advice/ attention.
P337 + P313 - If eye irritation persists: Get medical advice/ attention.
P362 - Take off contaminated clothing and wash 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 an approved waste disposal plant.

HMIS Classification

Health hazard: 2
Chronic health hazard: 0
Flammability: 0
Physical hazard: 0

NFPA Rating

Health hazard: 2
Fire hazard: 0
Reactivity hazard: 0

Potential Health Effects

Inhalation - May be harmful if inhaled. May cause respiratory tract irritation.
Skin - May be harmful if absorbed through skin. Causes skin irritation.
Eyes - Causes serious eye irritation.

Ingestion - May be harmful if swallowed.
Carcinogenicity - May cause cancer. Reproductive - May damage fertility or the unborn child.

Section 3. Composition/Information on Ingredients

Substances	Ingredient: Title Compound	Percent: 100	
Formula	C ₁₈ H ₂₀ O ₂	Formula Wt.	268.35
CAS No.	56-53-1	EC No.	200-278-5

Section 4. First Aid Measures

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
Eye Contact	Flush eyes with plenty of water for at least 15 minutes and consult a physician.
Skin Contact	Wash off with soap and plenty of water. Consult a physician.
Inhalation	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
Ingestion	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Section 5 . Firefighting Measures

Flash Point	Not available.
Extinguishing Media	Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.
Firefighting Procedures	Wear self-contained breathing apparatus for firefighting if necessary.
Unusual Fire Hazards	Not available.

Section 6. Accidental Release Measures

Personal Precautions	Use personal protective equipment. Avoid dust formation. Avoid breathing dust, vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.
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.
Methods and materials for containment and cleanup	Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Section 7. Handling and Storage

Handling	Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: Ambient
Hazardous Decomposition Products	Hazardous decomposition products formed under fire conditions. Carbon oxides.
Other Remarks	Synthetic

Section 8. Exposure Controls/Personal Protection

Personal protective equipment EXPOSURE CONTROLS

Contains no substances with occupational exposure limit values.
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

PERSONAL PROTECTION

Eye/face protection: Safety glasses with side-shields conforming to EN 166. 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. Full and splash contact - Material: Nitrile rubber, Minimum layer thickness: 0.11 mm, Break through time: 480 min., Material tested: Dermatrill® (KCL 740 / Aldrich Z677272, Size M).

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).

Section 9. Physical and Chemical Properties

Physical State	(Synthetic) Solid.	Color	White crystal powder.
Boiling Point	Not available.	Volatility	Not available.
Melting Point	169-172°C	Density	Not available.
Solubility	Soluble in alcohol, ether, chloroform, or fatty oils. Insoluble in water.	pH	Not available.
Flash Point	Not available.	Ignition temperature	Not available.
Lower explosion limit	Not available.	Autoignition temperature	Not available.
Upper explosion limit	Not available.	Vapor pressure	Not available.
Water solubility	Insoluble in water.	Odor	Not available.
Partition coefficient: n-octanol/water	log Pow: 5.07	Odor Threshold	Not available.
Relative vapor density	Not available.	Evaporation rate	Not available.

Section 10. Stability and Reactivity

Stability	Stable under recommended storage conditions.
Materials To Avoid	Strong oxidizing agents, strong bases, acid chlorides, acid anhydrides.
Hazardous Decomposition Products	Hazardous decomposition products formed under fire conditions. Carbon oxides.

Possibility of hazardous reactions Not available.

Conditions to avoid Not available.

Section 11. Toxicological Information

Oral LD50 Rat - > 3,000 mg/kg

Skin corrosion/irritation Not available.

Inhalation LC50 Not available.

Serious eye damage/irritation Not available.

Dermal LD50 Not available.

Respiratory or skin sensitization Not available.

Other information on acute toxicity Not available.

Germ cell mutagenicity Laboratory experiments have shown mutagenic effects.

Reproductive Toxicity Presumed human reproductive toxicant.

Aspiration Hazard Not available.

Specific organ toxicity single exposure (GHS) Inhalation - May cause respiratory irritation.

Synergistic effects Not available.

Specific organ toxicity repeated exposure (GHS) Not available.

Additional Information RTECS: WJ5600000

Teratogenicity Not available.

Signs and symptoms of exposure Stomach - irregularities - Based on human evidence.

Potential Health Effects Inhalation - May be harmful if inhaled. May cause respiratory tract irritation.
Skin - May be harmful if absorbed through skin. Causes skin irritation.
Eyes - Causes serious eye irritation.
Ingestion - May be harmful if swallowed.
Carcinogenicity - May cause cancer. Reproductive - May damage fertility or the unborn child.

Carcinogenicity This is or contains a component that has been reported to be carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification. Possible human carcinogen

IARC: 1 - Group 1: Carcinogenic to humans. (Diethylstilbestrol)

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: Known to be human carcinogen. (Diethylstilbestrol)

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.

Section 12. Ecological Information

Toxicity Toxicity to daphnia and other aquatic invertebrates. EC50 - Daphnia magna (Water flea) - 0.9 - 1.5 mg/l - 48 h

Mobility in soil Not available.

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

conducted.

Persistence and degradability Not available.

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

Bioaccumulative potential Indication of bioaccumulation.

Section 13. Disposal Considerations

Waste Disposal Dispose of material according to all federal, state, and local regulations.
Offer material to a licensed, professional waste disposal company to dispose of as unused product. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Section 14. Transport Information

DOT (US) Not dangerous goods.

IATA UN number: 3077 Class: 9 Packing Group: III
Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Diethylstilbestrol)

IMDG UN number: 3077 Class: 9 Packing Group: III EMS #: F-A, S-F
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Diethylstilbestrol)
Marine pollutant: yes

Further Information EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

Section 15. Regulatory Information

Reach No.

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 Components Acute health hazard, chronic health hazard.

Massachusetts Right To Know Components No components are subject to the Massachusetts Right to Know Act.
Diethylstilbestrol CAS #: 56-53-1 Revision Date: 1993-04-24

Pennsylvania Right To Know Components Diethylstilbestrol CAS #: 56-53-1 Revision Date: 1993-04-24

New Jersey Right To Know Components Diethylstilbestrol CAS #: 56-53-1 Revision Date: 1993-04-24

California Prop 65 Components WARNING! This product contains a chemical known to the State of California to cause cancer.
Diethylstilbestrol CAS #: 56-53-1 Revision Date: 2007-09-28
WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.
Diethylstilbestrol CAS #: 56-53-1 Revision Date: 2007-09-28.

Section 16. Other Information

Other information The information in this document is believed to be correct but is not necessarily complete. LKT does not guarantee the accuracy of the information. The burden of verifying the information in this document rests solely upon the user.

Updated 6/11/2020

For emergencies in the USA, call
CHEMTREC 800-424-9300