Safety Data Sheet

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Section 1: Identification

Product Name Azelaic Acid (Pharma Grade)
Commercial Name Azepur 99
Product Use Consumer, Pharmaceutical, Professional, and Industrial use
Restrictions On Use N/A

Product Code 30-5188

Company
PCCA
9901 South Wilcrest
Houston, TX 77099
Phone: 1-800-331-2498
Fax: 1-800-874-5760

In case of emergency contact:
CHEMTREC (24hr) 1-800-424-9300

Section 2: Hazard(s) Identification

OSHA Haz Com: CFR 1910.1200 3.2 Skin corrosion/irritation category 2, skin irrit. 2, H315 3.3 Serious eye damage/eye irritation category 2, eye irrit. 2, H319

Signal Word WARNING

Hazard Statement(s) Causes skin irritation. Causes serious eye irritation.

Pictogram(s) or Symbol(s)

Precautionary Statement(s):

Prevention Wear protective gloves/protective clothingeye protection/face protection/hearing protection

Response If on skin: wash with plenty of water. If in eyes: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation occurs: get medical advice/attention. If eye irritation persists: get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Storage N/A

Disposal N/A

Section 3: Composition/Information on Ingredients

Substance/Mixture Substance
Components Azelaic Acid
% By Weight N/A
CAS# 123-99-9
Molecular Weight 188.2 g/mol
Chemical Formula C9H16O4
Synonym(s) N/A

Mixtures

Name	CAS#	% by Weight	TLV/PEL	LC50/LD50
Azelaic Acid	123-99-9	N/A	N/A	N/A

Section 4: First-Aid Measures

Inhalation Provide fresh air. If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician.

Skin Contact Brush off loose particles from skin.

Eye Contact Do not rub the eyes. Mechanical stress can cause damage to the cornea. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER/doctor.

Ingestion Rinse mouth. Do not induce vomiting. Get medical advice/attention.

Symptoms/Effects

Acute Causes skin and eye irritation. Inhalation of dust may cause respiratory irritation.

Delayed Causes skin and eye irritation. Inhalation of dust may cause respiratory irritation.

Immediate Medical Attention

For specialist advice physicians should contact the poison centre.

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media

Water; Foam; Alcohol resistant foam; ABC-powder; Carbon dioxide (CO_2)

Unsuitable Extinguishing Media

Water jet.

Products of Combustion

Carbon monoxide (CO). Carbon dioxide (CO_2). During fire hazardous fumes/smoke could be produced.

Firefighters Special Equipment and Precautions

Keep containers cool with water spray. In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance. Self-contained breathing apparatus (SCBA). Standard protective clothing for firefighters.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: For non-emergency personnel- remove persons to safety. Ventilate affected area. Keep away from sources of ignition - No smoking. For emergency responders- wear breathing apparatus if exposed to vapours/dust/spray/gases Use personal protective equipment as required. Environmental precautions: Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. Methods and material for containment and cleaning up: Advice on how to contain a spill- covering of drains. Advice on how to clean up a spill- take up mechanically. Control of dust. Only vacuum clearners containing no ignition sources may be used for combustible dusts. Other information relating to spills and releases- Place in appropriate containers for disposal. Ventilate affected area. Reference to other sections: Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

Section 7: Handling and Storage

Precautions for safe handling: Recommendations- measures to prevent fire as well as aerosol and dust generation: Use local and general ventilation Use only in well-ventilated areas. Advice on general occupational hygiene- Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs. Conditions for safe storage, including any incompatibilities: Managing of associated risks - flammability hazards Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. - incompatible substances or mixtures Keep away from alkalis, oxidising substances, acids. Control of effects Protect against external exposure, such as High temperatures. UV-radiation/sunlight. Static discharges. Consideration of other advice Store in a well-ventilated place. Keep container tightly closed. - packaging compatibilities Keep only in original container

Section 8: Exposure Controls/Personal Protection

Exposure Limits	Relevant DNELs and other threshold levels: (Endpoint/Threshold level/protection goal, route of exposure/used in/exposure time) DNEL, 17.63 mg/m^3, human inhalatory, worker (industry), chronic- systemic effects DNEL, 10 mg/kg bw/day, human dermal, worker (industry), chronic- systemic effects DNEL, 4.348 mg/m^3, human inhalatory, consumer (private households), chronic- systemic effects DNEL, 5 mg/kg bw/day, human dermal, consumer (private households), chronic- systemic effects DNEL, 2.5 mg/kg bw/day, human oral, consumer (private households), chronic- systemic effects Relevant PNECs and other threshold levels: (Endpoint/Threshold level/Organism/environmental compartment/exposure time PNEC, 0.02 mg/l, aquatic organisms, freshwater, short-term (single instance) PNEC, 0.002 mg/l, aquatic organisms, marine water, short-term (single instance) PNEC, 0.16 mg/l, aquatic organisms, water, intermittent release PNEC, 912 mg/l, aquatic organisms, sewage treatment plant (STP), short-term (singel instance) PNEC, 0.093 mg/kg, aquatic organisms, freshwater sediment, short-term (single instance) PNEC, 0.009 mg/kg, aquatic organisms, marine sediment, short-term (single instance) PNEC, 0.007 mg/kg, terrestrial organisms, soil, short-term (single instance)
Engineering Controls	Exhaust ventilation.
Personal Protection	Eye/face protection- use safety goggle with side protection. Skin protection- chemical protective clothing. Hand protection- Wear suitable gloves. The selection of the suitable gloves does not only depend on the material, but also on other quality characteristics and varies from manufacturer to manufacturer. Type of material- nitrile rubber. Material thickness- use gloves with a minimum material thickness: >=0.38mm. Other protection measures- take recovery periods for skin regeneration. Preventative skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling. Provide eyewash stations and safety showers at the workplace. Respiratory protection: Control of dust. Avoid inhalation of the product. In case of inadequate ventilation wear respiratory protection. P2 (filters at least 94 % of airborne particles, colour code: White). Environmental exposure controls- Take appropriate precautions to avoid uncontrolled release into the environment. Keep away from drains, surface and ground water.

Section 9: Physical and Chemical Properties

Appearance	Solid (powder, flakes), white
Odor	Characteristic
Odor Threshold	N/A

Melting Point	106.5°C	**pH**	N/A
Freezing Point	N/A	**Vapor Pressure**	0 mmHg at 25°C
Boiling Point/Range	357.1°C	**Vapor Density**	1225 kg/m^3 at 25°C
Decomposition temperature	No data available	**Viscosity**	(Kinematic) Not relevant
Partition Coefficient: n-octanol/water	1.57 (25°C)	**Evaporation Rate**	Not determined
Flash Point	180°C	**Autoignition temperature**	Not determined
Flammability	This material is combustible.	**Flammability or Explosive Limits:**	
		Lower	LEL: 30 g/m^3
		Upper	N/A

Solubility(ies)	Water solubility: 1g/l at 1°C
Other	Other safety characteristics: Dust explosion class- ST 1 (weak explosive (rate of pressure; Kst>0 - <200 bar m/s)). Minimum ignition termperature (dust cloud)- 430°C. Minimum ignition energy- dust/air mixtures 5 mJ (inductance L=1 mH; UNI EN 13821:2004). Maximum rate of explosion pressure rise- 581 bar/s (14034-1 and 2:2011). Maximum explosion pressure- 8.8 bar. Surface tension- 41.6mN/m (23°C).

Section 10: Stability and Reactivity

Reactivity	This material is not reactive under normal ambient conditions.
Chemical Stability	The material is stable under normal ambient and anticipateed storage and handling conditions of termpareture and pressure.
Hazardous Polymerization	No known hazardous reactions.
Conditions to Avoid	There are no specific conditions known which have to be avoided.
Incompatible Materials	Oxidisers.
Hazardous Decomposition Products	Reasonably anticipated hazardoud decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

Section 11: Toxicological Information

RTECS N/A

Acute Toxicity
Shall not be classified as acutely toxic.

Skin Corrosion/Irritation
Causes skin irritation.

Serious Eye Damage/Irritation
Causes serious eye irration.

Respiratory or Skin Sensitization
Shall not be classified as a respiratory or skin sensitiser.

Germ Cell Mutagenicity
Shall not be classified as germ cell mutagenic.

Carcinogenicity
Shall not be classified as carcinogenic.

Reproductive Toxicity
Shall not be classified as a reproductive toxicant.

Routes of Entry
Oral, inhalation/vapour, dermal

Symptoms Related to Exposure
Shall not be classified as a specific target organ toxicant (single exposure). Shall not be classified as a specific target organ toxicant (repeated exposure).

Potential Health Effects
N/A

Target Organ(s) N/A

Section 12: Ecological Information

Ecotoxicity
Shall not be classified as hazardous to the aquatic environment. Aquatic toxicity (acute): (Endpoint, value, species, exposure time) LC50, >16 mg/l, fish, 96 h EC50, >20 mg/l, aquatic invertebrates, 48 h ErC50, >10 mg/l, algae, 24 h Aquatic toxicity (chronic): (Endpoint, value, species, exposure time) LC50, 9.8 mg/l, fish, 28 d EC50, 0.51 mg/l, aquatic invertebrates, 21 d The substance is readily biodegradable.

Persistance and Degradability
Process of degradability: (Process, degradation rate, time) oxygen depletion, 105%, 30 d DOC removal, >79-<89%, 19 d

Bioaccumulative Potential
n-octanol/water (log KOW)- 1.57 (25°C) BCF- 234-249

Mobility in Soil
Data are not available.

Other Adverse Effects
Data are not available.

Section 13: Disposal Considerations

Waste Disposal
Do not empty into drains. Avoid release to the environment.

Disposal of Container
Completely emptied packages can be recycles. Handle contaminated packages in the same way as the substance itself. Please consider the relevant national or regional provisions.

Other Considerations
Waste shall be separated into the categories that can be handles separately by the local or national waste management facilities.

Section 14: Transport Information

DOT Classification
Not subject to transport regulations. Non-environmentally hazardous acc. to the dangerous goods reulations.

Section 15: Regulatory Information

Regulations
Not listed.

Other
For this substance a chemical safety assessment has been carried out.

Section 16: Other Information

N/A