

SAFETY DATA SHEET

Revision Date 14-Feb-2020

Revision Number 2

1. Identification

Product Name Dicyclopentadiene diepoxide

Cat No. : L02940

CAS-No 81-21-0
Synonyms Bicyclopentadiene diepoxide

Recommended Use Laboratory chemicals.
Uses advised against Food, drug, pesticide or biocidal product use.
Details of the supplier of the safety data sheet

Company

Alfa Aesar
Thermo Fisher Scientific Chemicals, Inc.
30 Bond Street
Ward Hill, MA 01835-8099
Tel: 800-343-0660
Fax: 800-322-4757
Email: tech@alfa.com
www.alfa.com

Emergency Telephone Number

During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660.
After normal business hours, call Carechem 24 at (866) 928-0789.

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute oral toxicity	Category 3
Serious Eye Damage/Eye Irritation	Category 2

Label Elements

Signal Word

Danger

Hazard Statements

Toxic if swallowed
Causes serious eye irritation

**Precautionary Statements****Prevention**

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Wear eye/face protection

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Rinse mouth

Storage

Store locked up

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None identified

3. Composition/Information on Ingredients

Component	CAS-No	Weight %
2,4-Methano-2H-indeno [1,2-b:5,6-b'] bisoxirene, octahydro-	81-21-0	>95

4. First-aid measures

General Advice

If symptoms persist, call a physician. Show this safety data sheet to the doctor in attendance.

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention. Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention. If skin irritation persists, call a physician. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.

Inhalation

Remove from exposure, lie down. Remove to fresh air. If not breathing, give artificial respiration. Get medical attention. Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician.

Ingestion

Clean mouth with water. Get medical attention. Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

Most important symptoms and

No information available.

effects**Notes to Physician**

Treat symptomatically

5. Fire-fighting measures**Suitable Extinguishing Media** Carbon dioxide (CO₂). Dry chemical.**Unsuitable Extinguishing Media** No information available**Flash Point** No information available
Method - No information available**Autoignition Temperature****Explosion Limits****Upper** No data available
Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available**Specific Hazards Arising from the Chemical**

Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion ProductsCarbon monoxide (CO). Carbon dioxide (CO₂).**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA**Health**
3**Flammability**
1**Instability**
0**Physical hazards**
N/A**6. Accidental release measures****Personal Precautions** Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.**Environmental Precautions** Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional Ecological Information.**Methods for Containment and Clean Up** Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.**7. Handling and storage****Handling** Avoid contact with skin and eyes. Do not breathe dust. Pay attention to flashback.**Storage** Keep containers tightly closed in a cool, well-ventilated place. Refer product specification and/or label for storage temperature range.**8. Exposure controls / personal protection****Exposure Guidelines** This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.**Engineering Measures** Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protective Equipment

Eye/face Protection	Tight sealing safety goggles.
Skin and body protection	Wear appropriate protective gloves and clothing to prevent skin exposure. Impervious gloves.
Respiratory Protection	No protective equipment is needed under normal use conditions.
Hygiene Measures	When using do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing.

9. Physical and chemical properties

Physical State	Solid
Appearance	Beige
Odor	Odorless
Odor Threshold	No information available
pH	No information available
Melting Point/Range	185 - 189 °C / 365 - 372.2 °F
Boiling Point/Range	326 °C / 618.8 °F
Flash Point	No information available
Evaporation Rate	Not applicable
Flammability (solid,gas)	No information available
Flammability or explosive limits	
Upper	No data available
Lower	No data available
Vapor Pressure	No information available
Vapor Density	Not applicable
Specific Gravity	No information available
Solubility	No information available
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	
Decomposition Temperature	No information available
Viscosity	Not applicable
Molecular Formula	C10 H12 O2
Molecular Weight	164.2

10. Stability and reactivity

Reactive Hazard	None known, based on information available
Stability	Stable under normal conditions.
Conditions to Avoid	Incompatible products.
Incompatible Materials	Strong oxidizing agents
Hazardous Decomposition Products	Carbon monoxide (CO), Carbon dioxide (CO ₂)
Hazardous Polymerization	No information available.
Hazardous Reactions	None under normal processing.

11. Toxicological information**Acute Toxicity****Product Information**
Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
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2,4-Methano-2H-indeno [1,2-b:5,6-b'] bisoxirene, octahydro-	LD50 = 210 mg/kg (Rat)	LD50 = 8 g/kg (Rabbit)	Not listed
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Toxicologically Synergistic Products No information available

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

Irritation No information available

Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
2,4-Methano-2H-indeno [1,2-b:5,6-b'] bisoxirene, octahydro-	81-21-0	Not listed	Not listed	Not listed	Not listed	Not listed

Mutagenic Effects No information available

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure None known

STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects, both acute and delayed No information available

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system.

Persistence and Degradability Persistence is unlikely

Bioaccumulation/ Accumulation No information available.

Mobility Will likely be mobile in the environment due to its water solubility.

Component	log Pow
2,4-Methano-2H-indeno [1,2-b:5,6-b'] bisoxirene, octahydro-	1.187

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT

UN-No	UN2811
Proper Shipping Name	TOXIC SOLIDS, ORGANIC, N.O.S.
Hazard Class	6.1

Packing Group	III
TDG	
UN-No	UN2811
Proper Shipping Name	Toxic solid, organic, n.o.s.
Hazard Class	6.1
Packing Group	III
IATA	
UN-No	UN2811
Proper Shipping Name	Toxic solid, organic, n.o.s.
Hazard Class	6.1
Packing Group	III
IMDG/IMO	
UN-No	UN2811
Proper Shipping Name	Toxic solid, organic, n.o.s.
Hazard Class	6.1
Packing Group	III

15. Regulatory information

United States of America Inventory

Component	CAS-No	TSCA	TSCA Inventory notification - Active/Inactive	TSCA - EPA Regulatory Flags
2,4-Methano-2H-indeno [1,2-b:5,6-b'] bisoxirene, octahydro-	81-21-0	X	ACTIVE	-

Legend:

TSCA - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

- - Not Listed

TSCA 12(b) - Notices of Export Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSC), Korea (ECL).

Component	CAS-No	DSL	NDSL	EINECS	PICCS	ENCS	AICS	IECSC	KECL
2,4-Methano-2H-indeno [1,2-b:5,6-b'] bisoxirene, octahydro-	81-21-0	-	X	201-334-1	-	X	X	-	-

U.S. Federal Regulations

SARA 313	Not applicable
SARA 311/312 Hazard Categories	See section 2 for more information
CWA (Clean Water Act)	Not applicable
Clean Air Act	Not applicable
OSHA - Occupational Safety and Health Administration	Not applicable
CERCLA	Not applicable
California Proposition 65	This product does not contain any Proposition 65 chemicals.
U.S. State Right-to-Know Regulations	Not applicable

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

16. Other information**Prepared By**

Health, Safety and Environmental Department
Email: tech@alfa.com
www.alfa.com

Revision Date

14-Feb-2020

Print Date

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Revision Summary

SDS authoring systems update, replaces ChemGes SDS No. 81-21-0/2.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS