

Dynalene DYD-MX Molecular Sieves

1. Product and Company Identification

1.1 Product identifiers

Product Name: DYD-MX Molecular Sieves (all grades)
Producer: Dynalene, Inc.
Product Number: Not available.
CAS-No.: Not available.

1.2 Identified uses of the product and uses advised against

Identified Uses: Adsorbent / Desiccant

1.3 Details of the chemical supplier

Company: Dynalene, Inc.
5250 West Coplay Road
Whitehall, PA 18052
USA
Telephone: +1 610-262-9686
Fax: +1 610-262-7437

1.4 Emergency telephone number

Within the U.S.: +1 800-424-9300 (CHEMTREC)
Outside the U.S.: +1 703-527-3887 (CHEMTREC)

2. Hazards Identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin corrosion/irritation, (Category 3), H316
Serious eye damage/eye irritation (Category 2B), H320
Specific target organ toxicity, single exposure; respiratory irritation (Category 3), H335

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word: Warning

Hazard statement(s)

H316 Causes mild skin irritation
H320 Causes eye irritation
H335 May cause respiratory irritation

Precautionary statement(s)

Avoid breathing dust. Use only outdoors or in a well-ventilated area. Wash hands thoroughly after handling. If skin irritation occurs, get medical advice/attention.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or a doctor/physician if you feel unwell.

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.

Store locked up in a well-ventilated place. Keep container tightly closed. Dispose of contents/container within all applicable laws and regulations.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None.

3. Composition/Information on Ingredients**3.1 Product mixture**

Synonyms: Zeolite (synthetic), Mol Sieve
Molecular Wt: Not available.
CAS-No.: Not available.

Ingredients	CAS No.	Concentration
Zeolite	1318-01-1	75 – 100%
Magnesium aluminosilicate clay	1327-43-1	0 – 25%

4. First Aid Measures**4.1 Description of first aid measures****Skin exposure**

Wash thoroughly with soap and water. If irritation develops or persists, get medical attention.

Eye exposure

Immediately flush eyes with plenty of water for at least 15 minutes, while holding eyelids open. Seek medical attention at once.

Inhalation

Move person into fresh air. Get medical attention immediately if exposed person is having difficulty breathing.

Ingestion

Drink two or three glasses of water to dilute stomach contents. DO NOT induce vomiting. Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and in section 11.

4.3 Indication of any immediate medical attention and special treatment needed

This product is an adsorbent/desiccant that generates heat on contact with water. Contact with soft tissue or mucous membranes may cause thermal burns. Used product may have absorbed hazardous materials. Identify adsorbed materials and treat symptomatically.

5. Fire Fighting Measures**5.1 Suitable (and unsuitable) extinguishing media**

No special measures required. Choose extinguishing media that is suited for the surrounding fire. Water spray, alcohol-resistant foam, dry chemical, or carbon monoxide extinguishers are appropriate.

5.2 Specific hazards arising from the chemical

Spent or used product may contain adsorbed flammable or otherwise hazardous substances upon exposure to heat or water. Product user must identify adsorbed substances and inform fire-fighters of potential hazards.

5.3 Advice for firefighters

Wear standard PPE and equipment. If dusty conditions prevail, a dust mask is recommended. Active product gives off heat when exposed to water and can burn tissue. Flush with water to dissipate heat.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment, and emergency procedures

Proper protective equipment should be used to avoid product contact with skin and eyes. Avoid inhalation exposures. Spills of product may cause fall hazards. Personnel not wearing appropriate PPE should be excluded from spill area until clean-up is complete.

6.2 Environmental precautions

Do not let large amounts of product enter drains or open water courses.

6.3 Methods and materials for containment and cleaning up

Small spill: Sweep material into an appropriate container for disposal. Product evolves heat on contact with water, so use a large amount of water to thoroughly wash spill area in order to dissipate heat. Vacuum or wet methods are preferred for cleanup. Avoid dust generation during cleanup.

6.4 References to other sections

For disposal see section 13.

7. Handling and Storage

7.1 General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice. Wash hands after handling product, before breaks and at the end of the day.

7.2 Precautions for safe handling

Do not inhale dusts generated from this product. Do not get in eyes. Avoid contact with skin.

7.3 Conditions for safe storage, including any incompatibilities

Keep product away from moisture; considerable heat is generated when product is mixed with water. Store in a dry place. Before removing lids, open bung holes to release pressure. Open container slowly to avoid creating or raising dust. Product shelf life is unlimited if kept dry in an airtight container. Tightly reseal containers after opening to preserve product effectiveness. Do not return any removed product to original container.

8. Exposure Controls/Personal Protection

8.1 Control and exposure limits recommended by the chemical manufacturer

USA OSHA, Permissible Exposure Limit (PEL): 15 mg/m³ Time Weighted Average (TWA)

USA OSHA, Short-term Exposure Limit (STEL): 5 mg/m³ TWA

USA ACGIH, Threshold Limit Values (TLV): 10 mg/m³ TWA

USA ACGIH, STEL: 3 mg/m³ TWA

8.2 Appropriate engineering controls

Use with adequate ventilation and use local exhaust, where possible, in confined spaces. Prudent practice is to ensure eyewash/safety shower stations are available near areas where this product is used.

8.3 Individual protection measures, such as personal protective equipment

Respiratory protection

None needed for normal circumstances of use. If airborne product concentrations exceed exposure limits, use a NIOSH/MSHA-approved respirator.

Eye protection

Wear safety glasses with side shields.

Hand protection

Wear gloves suitable for routine industrial use.

Body protection

Wear clothing to prevent skin contact, such as long sleeves and coveralls.

9. Physical and Chemical Properties**9.1 Information on basic physical and chemical properties**

a) Appearance	Beige, ivory beads.
b) Odor	Odorless.
c) Odor threshold	Not applicable.
d) pH	@20°C, 9.0 - 11.5 (5% in water)
e) Melting/freezing point	>1600°C (>2900°F)
f) Boiling point	Not determined.
g) Flash point	Not applicable
h) Evaporation rate	Not applicable
i) Flammability (solid, gas)	Not applicable
j) Upper/lower flammability or explosive limits	Upper (UEL): Not applicable Lower (LEL): Not applicable
k) Vapor pressure	Not applicable
l) Vapor density	Not applicable
m) Relative density	550 – 580 g/L
n) Water solubility	Insoluble, but will adsorb moisture
o) Partition coefficient: n-octanol/water	Not applicable
p) Auto-ignition temp	Not applicable.
q) Decomposition temp	Not applicable.
r) Other data	Does not soften below 700°C (1292°F)

10. Stability and Reactivity**10.1 Reactivity**

No data available.

10.2 Chemical stability

Stable under ordinary conditions of use and storage when kept dry in sealed containers.

10.3 Conditions to avoid

Product evolves considerable heat upon contact with moist air or water. Used product may contain adsorbed hazardous materials that could be released upon heating or contact with water.

10.4 Incompatible materials

Prevent unintentional contact with water or moist air.

10.5 Hazardous decomposition products

Used product may release adsorbed hazardous materials on exposure to heat, humid air, or water.

11. Toxicological Information

11.1 Information on toxicological effects

LD50 Oral – rat: > 10 000 mg/kg
LD50 Dermal – rabbit: > 2000 mg/kg
LC50 Inhalation – rat: > 18.3 mg/L

Irritancy of product

Short-term single exposure is unlikely to cause skin irritation. Ingestion, inhalation, or contact with eyes or mucous membranes will cause irritation or thermal burns. Chronic exposure to respirable dust may lead to delayed lung injury such as fibrosis.

Reproductive toxicity

This product is not reported to produce mutagenic, embryotoxic, teratogenic, or reproductive effects in humans.

Suspected cancer agent

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, or OSHA.

Reproductive toxicity

This product is not reported to produce mutagenic, embryotoxic, teratogenic, or reproductive effects in humans.

Medical conditions aggravated by exposure

Asthma and chronic respiratory conditions may be aggravated by exposure to this product.

12. Ecological Information

12.1 Ecotoxicity (aquatic and terrestrial)

This product may be harmful to aquatic life if large quantities are released into bodies of water.

12.2 Persistence and degradability

No data available

12.3 Bioaccumulation potential

No data available

12.4 Mobility in soil

No data available

12.5 Other adverse effects

None

13. Disposal Considerations

13.1 Waste treatment methods

Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, is not expected to be a hazardous waste according to US RCRA regulations. Used product may have adsorbed hazardous materials. Chemical waste generator must determine whether discarded product is classified as a hazardous waste. Never release product, used or unused, to public sewers or drainage.

14. Transport Information

DOT / IMDG / IATA

Not dangerous goods.

15. Regulatory Information

SARA 302	No components of this material are subject to the reporting requirements of SARA Title III, Section 302 (Extremely Hazardous Substances).
SARA 313	No components of this material are subject to reporting levels established by SARA Title III, Sections 313 (Toxics Release Inventory Chemicals).
SARA 311/312	(Emergency Planning and Community Right-to-Know Act) Irritation hazard
Massachusetts Right To Know	No components are subject to the Massachusetts Right to Know Act.
Pennsylvania Right To Know	No components are subject to the Pennsylvania Right to Know Act.
New Jersey Right To Know	No components are subject to the New Jersey Right to Know Act.
TSCA	The following components are on the Toxic Substance Control Act Inventory: Magnesium aluminosilicate clay, 1327-43-1
EINECS	All of the components of this product are on the European Inventory of Existing Commercial Chemical Substances.
California Prop 65	This product contains no ingredients that cause cancer or reproductive harm known to the state of California.
Canada DSL	The following components of this product are on the Canadian Domestic Substance List: Magnesium aluminosilicate clay, 1327-43-1

16. Other Information

Revision Date
January 27, 2021

This SDS was prepared by Dynalene, Inc.

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. Dynalene Heat Transfer Fluids assumes no responsibility for injury to the vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, Dynalene Heat Transfer Fluids assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in their use of the material.