



Azo-Cat 23

Safety Data Sheet

According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)
Issue date: 10/16/2025 Version: 1.0

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Trade name : Azo-Cat 23
Product code : AGT-23

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Catalyst

1.4. Supplier's details

Manufacturer

Azon USA Inc.
2204 Ravine Rd
Kalamazoo, Michigan 49004
USA
T 269-385-5942

1.5. Emergency phone number

Emergency number : For Hazardous Materials or Dangerous Goods Incident Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC Day or Night: 1-800-424-9300 (Toll Free, USA) / 703-527-3887 (Virginia, USA)
CCN 2189
Back-up Emergency Number: +1 703-741-5970 (Washington, DC)

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Serious eye damage/eye irritation, Category 2A H319 Causes serious eye irritation.
Full text of H statements : see section 16

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Warning
Hazard statements (GHS US) : H319 - Causes serious eye irritation
Precautionary statements (GHS US) : Wash hands, forearms and face thoroughly after handling.
Wear protective clothing, eye and face protection, protective gloves.
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 or attention.

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2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
2,2'-dimorpholinyl-diethyl ether	CAS-No.: 6425-39-4	35-60	Eye Irrit. 2A, H319 Aquatic Acute 3, H402 Aquatic Chronic 3, H412

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

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

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general	: First aider: Pay attention to self-protection. Never give anything by mouth to an unconscious person. Give artificial respiration if necessary. Induce artificial respiration with mask fitted with one-way valve or other suitable device but, not mouth-to-mouth. IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin areas with mild soap and water, followed by warm water rinse. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
First-aid measures after eye contact	: 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.
First-aid measures after ingestion	: Rinse mouth. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical advice/attention.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation	: Not expected to present a significant inhalation hazard under anticipated conditions of normal use.
Symptoms/effects after skin contact	: May cause slight irritation.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: May cause irritation to the digestive tract.
Most Important Symptoms/Effects	: Causes serious eye irritation.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment	: IF exposed or concerned: Get medical advice/attention.
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SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Dry chemical, CO₂, or water spray or regular foam.
Unsuitable extinguishing media : None known.

5.2. Specific hazards arising from the chemical

Fire hazard : No fire hazard.
Reactivity in case of fire : The product is non-reactive under normal conditions of use, storage and transport.
Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon dioxide. Carbon monoxide. Nitrogen oxides.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection. Move containers from fire area if it can be done without personal risk. Use water spray or fog for cooling exposed containers. Prevent fire-fighting water from entering environment.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid all personal contact including breathing in the mist, spray, vapors. Do not take actions involving personal risks. Absorb spillage to prevent material-damage. Stop leak if safe to do so. Notify authorities if product enters sewers or public waters.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Evacuate the danger area. If possible without taking personal risks, Remove ignition sources. If outdoors, move to an area upwind of the danger area. Prevent other non-emergency personnel from entering the danger area. Only qualified personnel equipped with suitable protective equipment may intervene.

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".
Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so. Prevent runoff from entering drains, sewers or waterways.
Environmental precautions : Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.2. Methods and materials for containment and cleaning up

For containment : Contain with non-combustible inert absorbent. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.
Methods for cleaning up : Take up in non-combustible inert absorbent and place into container for disposal. Contaminated absorbent material may pose the same hazard as the spilled product. Decontaminate surfaces and equipment with water and detergent. Until a sufficient level of dilution is achieved, the decontamination water may pose the same hazards as the product. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

For further information refer to section 8: "Exposure controls/personal protection", For further information refer to section 13

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SECTION 7 Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Avoid breathing spray, mist, vapors. Do not get in eyes, on skin, or on clothing.
- Hygiene measures : Always wash hands after handling the product. Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including incompatibilities

- Storage conditions : Store in a cool, dry and well-ventilated area away from incompatible substances. Protect from sunlight. Keep container tightly closed. Store locked up.
- Incompatible materials : Oxidizing agents.
- Packaging materials : Store always product in container of same material as original container.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

- Appropriate engineering controls : Ensure good ventilation of the work station. Handle in accordance with good industrial hygiene and safety procedures. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
- Environmental exposure controls : Avoid release to the environment. Take measures to reduce or limit air emissions and releases to soil and the aquatic environment.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:

Personal protective equipment should be chosen according to national standards and in discussion with the supplier of the protective equipment. Wear recommended personal protective equipment.

Hand protection:

Protective gloves. Wear suitable gloves resistant to chemical penetration

Eye protection:

Chemical goggles or safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of inadequate ventilation wear respiratory protection. Self-contained breathing apparatus

Personal protective equipment symbol(s):



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SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	: Liquid
Color	: Clear to light yellow
Odor	: Mild amine
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 93.33 °C / > 200 °F
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: 1.009 – 1.02 @ 25 °C / 77 °F
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 32 – 52 @ 25 °C / 77 °F
Explosion limits	: No data available
Particle characteristics	: No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Incompatible materials.

10.5. Incompatible materials

Oxidizing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition generates: Carbon dioxide. Carbon monoxide. Nitrogen oxides.

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SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

2,2'-dimorpholinyl-diethyl ether

LD50 oral rat > 2000 mg/kg body weight

LD50 dermal rabbit 3038 mg/kg body weight

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

2,2'-dimorpholinyl-diethyl ether

NOAEL (oral,rat,90 days) 150 mg/kg body weight

Aspiration hazard : Not classified

Symptoms/effects after inhalation : Not expected to present a significant inhalation hazard under anticipated conditions of normal use.

Symptoms/effects after skin contact : May cause slight irritation.

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

Symptoms/effects after ingestion : May cause irritation to the digestive tract.

Most Important Symptoms/Effects : Causes serious eye irritation.

SECTION 12 Ecological information

12.1. Ecotoxicity

Hazardous to the aquatic environment, short-term (acute) : Harmful to aquatic life

Hazardous to the aquatic environment, long-term (chronic) : Harmful to aquatic life with long lasting effects

2,2'-dimorpholinyl-diethyl ether

LC50 - Fish [1] 4219.96 mg/l

EC50 - Crustacea [1] > 100 mg/l

EC50 72h - Algae [1] > 100 mg/l

EC50 96h - Algae [1] 31.416 mg/l

12.2. Persistence and degradability

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Persistence and degradability Not established.

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2,2'-dimorpholinyl-diethyl ether

Persistence and degradability	Not rapidly degradable
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12.3. Bioaccumulative potential

2,2'-dimorpholinyl-diethyl ether

Partition coefficient n-octanol/water (Log Pow)	-1.31
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12.4. Mobility in soil

2,2'-dimorpholinyl-diethyl ether

Mobility in soil	12.98
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12.5. Other adverse effects

Ozone	: Not classified
Fluorinated greenhouse gases	: No

SECTION 13 Disposal considerations

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations. Dispose of this material and its container at hazardous or special waste collection point. Refer to all applicable national, international and local regulations or provisions.
Additional information	: Do not re-use empty containers.
Ecological waste information	: Avoid release to the environment.

SECTION 14 Transport information

In accordance with DOT / TDG / IMDG / IATA

DOT	TDG	IMDG	IATA
14.1. UN number			
Not regulated for transport			
14.2. Proper Shipping Name			
Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)			
Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group			
Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards			
		Not regulated	
No supplementary information available			

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14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT

Not regulated

TDG

Not regulated

IMDG

Not regulated

IATA

Not regulated

SECTION 15 Regulatory information

15.1. Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

PEG Ester	CAS-No. Trade Secret	40 – 60%
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This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

CANADA

2,2'-dimorpholinyl diethyl ether (6425-39-4)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16 Other information

According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Issue date : 10/16/2025

Data sources : SDS prepared by DGF based on prior ChemTrec edition of Azo-Cat 24 Version 1.0.

Full text of hazard classes and H-statements

H319	Causes serious eye irritation
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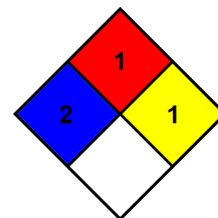
Full text of hazard classes and H-statements

H402	Harmful to aquatic life
H412	Harmful to aquatic life with long lasting effects

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

NFPA fire hazard : 1 - Materials that must be preheated before ignition can occur.

NFPA reactivity : 1 - Materials that in themselves are normally stable but can become unstable at elevated temperatures and pressures.



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.