

Prepared according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

Date of issue: 11/08/2016

Revision date: 04/03/2025

Version: 1.2

SECTION 1: IDENTIFICATION

1.1. PRODUCT IDENTIFIER

Product name : AX-52

Product code : Not available

1.2. RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

Use of the substance/mixture : Non-Destructive Testing

1.3. DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Manufacturer

Magnaflux
155 Harlem Ave.
Glenview, IL 60025 - USA
T: 847-657-5300

Distributor

1.4. EMERGENCY TELEPHONE NUMBER

Emergency number : CHEMTREC 800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

2.1. CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

The hazards given in this SDS apply to the product at full concentration. By diluting the product, the hazards will be reduced. It is up to the employer/user to determine the proper personal protection equipment and safety precautions when using diluted product.

GHS classification

Skin Irrit. 2

Eye Irrit. 2A

2.2. LABEL ELEMENTS

GHS labelling

Hazard pictograms (GHS) :



GHS07

Signal word (GHS) :

Warning

Hazard statements (GHS) :

Causes skin irritation.
Causes serious eye irritation.

Precautionary statements (GHS) :

Wash hands thoroughly after handling.
Wear protective gloves, eye protection, face protection.
If on skin: Wash with plenty of water.
Take off contaminated clothing and wash it before reuse.
If skin irritation occurs: Get medical advice/attention.
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.

2.3. OTHER HAZARDS

No additional information available

2.4. UNKNOWN ACUTE TOXICITY (GHS)

Not applicable

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. SUBSTANCES

Not applicable

3.2. MIXTURES

Name	Product identifier	%
Pentanedioic acid, 1,5-dimethyl ester	(CAS No) 1119-40-0	9.30
Phosphonic acid, [nitrilotris(methylene)]tris-, compound with 2-aminoethanol and 2,2',2''-nitrilotris[ethanol]	(CAS No) 68413-75-2	5.00
Dimethyl succinate	(CAS No) 106-65-0	3.30
Dimethyl adipate	(CAS No) 627-93-0	2.25

SECTION 4: FIRST AID MEASURES

4.1. DESCRIPTION OF FIRST AID MEASURES

- First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
- First-aid measures after skin contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.
- First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. If irritation persists, get medical attention.
- First-aid measures after ingestion : If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

4.2. MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

- Symptoms/injuries after inhalation : May cause respiratory tract irritation.
- Symptoms/injuries after skin contact : Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin.
- Symptoms/injuries after eye contact : Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
- Symptoms/injuries after ingestion : May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

4.3. INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

SECTION 5: FIREFIGHTING MEASURES

5.1. EXTINGUISHING MEDIA

- Suitable extinguishing media : Treat for surrounding material.
- Unsuitable extinguishing media : None known.

5.2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

- Fire hazard : Products of combustion may include, and are not limited to: oxides of carbon, nitrogen oxides, phosphorus oxides.

5.3. ADVICE FOR FIREFIGHTERS

- Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

- General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Avoid contact with skin and eyes. Avoid breathing vapour or mist. Ensure adequate ventilation.

6.2. METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

- For containment : Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
- Methods for cleaning up : Scoop up material and place in a disposal container.

6.3. REFERENCE TO OTHER SECTIONS

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

SECTION 7: HANDLING AND STORAGE

7.1. PRECAUTIONS FOR SAFE HANDLING

- Precautions for safe handling : Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke.
- Hygiene measures : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

- Storage conditions : Keep out of the reach of children. Keep container tightly closed. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Containers which are opened should be properly resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

7.3. SPECIFIC END USE(S)

Not available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. CONTROL PARAMETERS

Pentanedioic acid, 1,5-dimethyl ester (1119-40-0)	
ACGIH	Not applicable
OSHA	Not applicable
Phosphonic acid, [nitrilotris(methylene)]tris-, compound with 2-aminoethanol and 2,2',2''-nitrilotris[ethanol] (68413-75-2)	
ACGIH	Not applicable
OSHA	Not applicable
Dimethyl succinate (106-65-0)	
ACGIH	Not applicable
OSHA	Not applicable
Dimethyl adipate (627-93-0)	
ACGIH	Not applicable
OSHA	Not applicable

8.2. EXPOSURE CONTROLS

- Appropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.
- Hand protection : Wear chemically resistant protective gloves.
- Eye protection : Wear eye protection.
- Skin and body protection : Wear suitable protective clothing.
- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Environmental exposure controls : Maintain levels below Community environmental protection thresholds.
- Other information : Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

- Physical state : Liquid
- Appearance : Yellow liquid
- Colour : Yellow
- Odour : Mild
- Odour threshold : No data available
- pH : 9.1 @ 5% (w/w)
- Melting point : No data available

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Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 100 °C (> 212 °F)
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: Not flammable
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Vapour pressure	: No data available
Relative density	: 1.0377
Relative vapour density at 20 °C	: No data available
Solubility	: Soluble
Partition coefficient n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: 10.79 cSt
Viscosity, dynamic	: No data available

9.2. OTHER INFORMATION

No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1. REACTIVITY

No dangerous reaction known under conditions of normal use.

10.2. CHEMICAL STABILITY

Stable under normal storage conditions.

10.3. POSSIBILITY OF HAZARDOUS REACTIONS

No dangerous reaction known under conditions of normal use.

10.4. CONDITIONS TO AVOID

Heat. Incompatible materials.

10.5. INCOMPATIBLE MATERIALS

Oxidizing agent. Reducing agents.

10.6. HAZARDOUS DECOMPOSITION PRODUCTS

May include, and are not limited to: oxides of carbon.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. INFORMATION ON TOXICOLOGICAL EFFECTS

Acute toxicity : Not classified.

AX-52	
LD50 oral rat	> 2000 mg/kg (Calculated acute toxicity estimate)
LD50 dermal rabbit	> 2000 mg/kg (Calculated acute toxicity estimate)
LC50 inhalation rat	> 20 mg/l/4h (Calculated acute toxicity estimate)
Pentanedioic acid, 1,5-dimethyl ester (1119-40-0)	
LD50 oral rat	8191 mg/kg
LC50 inhalation rat	> 5.6 mg/l/4h
Dimethyl succinate (106-65-0)	
LD50 oral rat	> 5 g/kg
LD50 dermal rabbit	> 5 g/kg
Dimethyl adipate (627-93-0)	
LD50 oral rat	1920 mg/kg

Skin corrosion/irritation	: Causes skin irritation. pH: 9.1 @ 5% (w/w)
Serious eye damage/irritation	: Causes serious eye irritation. pH: 9.1 @ 5% (w/w)
Respiratory or skin sensitisation	: Based on available data, the classification criteria are not met
Germ cell mutagenicity	: Based on available data, the classification criteria are not met
Carcinogenicity	: Based on available data, the classification criteria are not met
Reproductive toxicity	: Based on available data, the classification criteria are not met
Specific target organ toxicity (single exposure)	: Based on available data, the classification criteria are not met
Specific target organ toxicity (repeated exposure)	: Based on available data, the classification criteria are not met
Aspiration hazard	: Based on available data, the classification criteria are not met
Symptoms/injuries after inhalation	: May cause respiratory tract irritation.
Symptoms/injuries after skin contact	: Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin.
Symptoms/injuries after eye contact	: Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
Symptoms/injuries after ingestion	: May be harmful if swallowed. May cause stomach distress, nausea or vomiting.
Other information	: Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12: ECOLOGICAL INFORMATION

12.1. TOXICITY

Ecology - general : May cause long-term adverse effects in the aquatic environment.

Pentanedioic acid, 1,5-dimethyl ester (1119-40-0)	
LC50 fish 1	19.6 - 26.2 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 1	122.1 - 163.5 mg/l (Exposure time: 48 h - Species: Daphnia magna)
Dimethyl succinate (106-65-0)	
LC50 fish 1	50 - 100 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])

12.2. PERSISTENCE AND DEGRADABILITY

AX-52	
Persistence and degradability	Not established.

12.3. BIOACCUMULATIVE POTENTIAL

AX-52	
Bioaccumulative potential	Not established.
Dimethyl succinate (106-65-0)	
Partition coefficient n-octanol/water	0.19 (at 25 °C)

12.4. MOBILITY IN SOIL

No additional information available

12.5. OTHER ADVERSE EFFECTS

Effect on the global warming : No known effects from this product.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. WASTE TREATMENT METHODS

Waste disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.

Additional information : Empty containers may contain residues which are hazardous. Do not reuse container.

SECTION 14: TRANSPORT INFORMATION

In accordance with DOT/TDG/IATA/IMDG

DOT (bulk) : Not regulated for transport

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DOT (non-bulk)	: Not regulated for transport
TDG	: Not regulated for transport
IATA	: Not regulated for transport
IMDG	: Not regulated for transport

ADDITIONAL INFORMATION

Other information	: No supplementary information available.
Special transport precautions	: Do not handle until all safety precautions have been read and understood.

SECTION 15: REGULATORY INFORMATION

15.1. FEDERAL REGULATIONS

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

All components of this product are listed, or excluded from listing, on the Canadian DSL (Domestic Substances List) and NDSL (Non-Domestic Substances List) inventories.

Pentanedioic acid, 1,5-dimethyl ester (1119-40-0)

EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule
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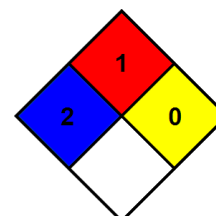
Dimethyl succinate (106-65-0)

EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule
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Dimethyl adipate (627-93-0)

EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule
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NFPA health hazard	: 2
NFPA fire hazard	: 1
NFPA reactivity	: 0



15.2. US STATE REGULATIONS

AX-52

State or local regulations	This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.
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SECTION 16: OTHER INFORMATION

Date of issue	: 11/08/2016
Revision date	: 04/03/2025
Other information	: None.

Indication of changes:
pH value.

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