



1. Product and Company Identification

Material name EP5700 B
Version # 01
Revision date 01-12-2011
CAS # Mixture
Manufacturer Ergon Armor
Division Memphis
Address PO Box 1639
 Jackson, MS 39215-1639
Contact Name Mary Ellen Snow
E-Mail mary.snow@ergon.com
Hours of Operation 8:00AM - 5:00PM
ERGON General Assistance 1 (800) 222 7122
CHEMTREC North America 1 (800) 424 9300 International 1 (703) 527 3887

2. Hazards Identification

Emergency overview Corrosive. Causes skin and eye burns. Prolonged exposure may cause chronic effects.
OSHA regulatory status This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).
Potential health effects
Routes of exposure Inhalation. Ingestion. Skin contact. Eye contact.
Eyes Causes eye burns. Risk of serious damage to eyes. Do not get this material in contact with eyes.
Skin Causes skin burns. Do not get this material in contact with skin.
Inhalation Causes burns. Prolonged inhalation may be harmful. Do not breathe dust/fume/gas/mist/vapors/spray.
Ingestion Components of the product may be absorbed into the body by ingestion. Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus and possibly the digestive tract. Do not ingest.
Target organs Eyes. Liver. RESPIRATORY SYSTEM. Skin. Kidneys.
Chronic effects Edema. Jaundice. Liver injury may occur. Kidney injury may occur.
Signs and symptoms Edema. Liver enlargement. Jaundice. Proteinuria. Irritation of eyes and mucous membranes.
Potential environmental effects May cause long-term adverse effects in the environment.

3. Composition / Information on Ingredients

Hazardous components	CAS #	Percent
MXDA	1477-55-0	1 - 2.5
BENZYL ALCOHOL	100-51-6	10 - 20
Non-hazardous components	CAS #	Percent
1,2-DIAMINOCYCLOHEXANE	694-83-7	0 - 10
2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL	90-72-2	0 - 10
PROPRIETARY INGREDIENTS	N/A	5 - 20
MINERAL FILLER	Mixture	10 - 20
4,4'-METHYLENEBIS(CYCLOHEXYLAMINE)	1761-71-3	10 - 20
MIXED CYCLOALIPHATIC AMINES	Mixture	30 - 50

4. First Aid Measures

First aid procedures

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

Skin contact

Take off immediately all contaminated clothing. Immediately flush skin with plenty of water. Get medical attention immediately. For minor skin contact, avoid spreading material on unaffected skin. Wash clothing separately before reuse.

Inhalation

Move to fresh air. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Get medical attention immediately.

Ingestion

Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

Notes to physician

In case of shortness of breath, give oxygen. Keep victim warm. Symptoms may be delayed.

General advice

Immediate medical attention is required. In case of shortness of breath, give oxygen. Keep victim warm. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire Fighting Measures

Flammable properties

Combustible by OSHA criteria. NFPA Rating Fire = 2. Materials that must be moderately heated or exposed to relative high ambient temperatures before ignition can occur. Heat may cause the containers to explode. Runoff to sewer may cause fire or explosion hazard.

Extinguishing media

Suitable extinguishing media

Water. Dry powder. Carbon dioxide (CO₂). Alcohol foam.

Unsuitable extinguishing media

Do not use a solid water stream as it may scatter and spread fire.

Protection of firefighters

Specific hazards arising from the chemical

Fire may produce irritating, corrosive and/or toxic gases.

Specific methods

In the event of fire and/or explosion do not breathe fumes. In the event of fire, cool tanks with water spray. Use water spray to cool unopened containers.

6. Accidental Release Measures

Personal precautions

Keep unnecessary personnel away. Keep upwind. Keep out of low areas. Keep people away from and upwind of spill/leak. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not contaminate water.

Methods for containment

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Prevent entry into waterways, sewer, basements or confined areas.

Methods for cleaning up

Should not be released into the environment.

Large Spills: Dike far ahead of spill for later disposal. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Following product recovery, flush area with water.

Never return spills in original containers for re-use.

7. Handling and Storage

Handling

DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Do not smoke. All equipment used when handling the product must be grounded. Do not get this material in contact with eyes. Do not get this material in contact with skin. Do not get this material on clothing. Do not use in areas without adequate ventilation. Avoid prolonged exposure. Wash thoroughly after handling. Avoid release to the environment.

Storage

The pressure in sealed containers can increase under the influence of heat. Keep away from heat and sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a well-ventilated place. Keep container tightly closed. Keep away from food, drink and animal feedingstuffs. Keep out of the reach of children.

8. Exposure Controls / Personal Protection

Occupational exposure limits

ACGIH

Components

MXDA (1477-55-0)

Type

TWA

Value

0.1000 mg/m³

U.S. - OSHA

Components

MXDA (1477-55-0)

Type

Ceiling

Value

0.1000 mg/m³

Engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal protective equipment

Eye / face protection

Do not get in eyes. Chemical goggles are recommended.

Skin protection

Do not get this material in contact with skin. Do not get this material on clothing. Wear chemical protective equipment that is specifically recommended by the manufacturer. It may provide little or no thermal protection. Structural firefighters protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations. Chemical resistant gloves.

Respiratory protection

Do not breathe dust/fume/gas/mist/vapors/spray.

General hygiene considerations

Do not get in eyes. Do not get this material in contact with skin. Do not get this material on clothing. When using, do not eat, drink or smoke. Keep away from food and drink. Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

Appearance

Not available.

Color

Not available.

Odor

Not available.

Odor threshold

Not available.

Physical state

Liquid.

Form

Liquid.

pH

Not available.

Melting point

Not available.

Freezing point

Not available.

Boiling point

Not available.

Flash point

Not available.

Evaporation rate

Not available.

Flammability limits in air, upper, % by volume

Not available.

Flammability limits in air, lower, % by volume

Not available.

Vapor pressure

Not available.

Vapor density	Not available.
Specific gravity	Not available.
Relative density	Not available.
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
VOC	Not available.

10. Chemical Stability & Reactivity Information

Chemical stability	Stable at normal conditions.
Conditions to avoid	Keep away from sources of ignition - No smoking.
Incompatible materials	Peroxides. Oxidizing materials. This product may react with strong acids. This product may react with strong alkalis.
Hazardous decomposition products	If product is burned hazardous gases such as oxides of carbon and nitrogen and various hydrocarbons may be produced. Upon combustion, oxides of chlorine may be released.

11. Toxicological Information

Toxicological data

Product	Test Results
EP5700 B (Mixture)	Acute Dermal LD50 Rabbit: 14063 mg/kg estimated Acute Inhalation LC100 Rat: 1406 mg/l estimated Acute Inhalation LC50 Rat: 7031 mg/l estimated Acute Oral LD50 Mouse: 11110 mg/kg estimated Acute Oral LD50 Rabbit: 13641 mg/kg estimated Acute Oral LD50 Rat: 8649 mg/kg estimated Acute Other LD50 Guinea pig: 2813 mg/kg estimated Acute Other LD50 Mouse: 2278 mg/kg estimated
Components	Test Results
BENZYL ALCOHOL (100-51-6)	Acute Dermal LD50 Guinea pig: <= 5 ml/kg Acute Dermal LD50 Rabbit: 2000 mg/kg Acute Inhalation LC100 Rat: 200 - 300 mg/l 8.00 Hours Acute Inhalation LC50 Rat: 1000 mg/l 8.00 Hours Acute Oral LD50 Mouse: 1580 mg/kg Acute Oral LD50 Rabbit: 1940 mg/kg Acute Oral LD50 Rat: 1230 - 3100 mg/kg Acute Other LD50 Guinea pig: >= 400 mg/kg Acute Other LD50 Mouse: 324 mg/kg Acute Other LD50 Mouse: <= 0.499999 ml/kg Acute Other LD50 Rat: 53 mg/kg

* Estimates for product may be based on additional component data not shown.

Sensitization

US ACGIH Threshold Limit Values: Skin designation

MXDA (CAS 1477-55-0)

Can be absorbed through the skin.

Acute effects	Causes burns.
Local effects	Liver toxicity.
Chronic effects	Hazardous by OSHA criteria. Prolonged inhalation may be harmful. Repeated absorption may cause disorder of central nervous system, liver, kidneys and blood. Prolonged exposure may cause chronic effects.

Subchronic effects	Kidney injury may occur.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
Skin corrosion/irritation	Hazardous by OSHA criteria.
Further information	Symptoms may be delayed.

12. Ecological Information

Ecotoxicological data

Product	Test Results
EP5700 B (Mixture)	LC50 Fish: 1137 mg/l 96.00 Hours estimated
Components	Test Results
BENZYL ALCOHOL (100-51-6)	LC50 Bluegill (Lepomis macrochirus): 10 mg/l 96.00 Hours

* Estimates for product may be based on additional component data not shown.

Ecotoxicity	Contains a substance which causes risk of hazardous effects to the environment.
Environmental effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Persistence and degradability	Not available.

13. Disposal Considerations

Disposal instructions	Do not allow this material to drain into sewers/water supplies. This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose in accordance with all applicable regulations.
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14. Transport Information

DOT

Basic shipping requirements:

UN number	2735
Proper shipping name	Amines, Liquid, Corrosive, N.O.S. (Cycloaliphatic Amines)
Hazard class	8
Packing group	III
Additional information:	
ERG number	153



DOT

15. Regulatory Information

US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200. CERCLA/SARA Hazardous Substances - Not applicable.
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CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - Yes Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
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Section 302 extremely hazardous substance No

Section 311 hazardous chemical No

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

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

US - Pennsylvania RTK - Hazardous Substances: Listed substance

BENZYL ALCOHOL (CAS 100-51-6)	Listed.
MXDA (CAS 1477-55-0)	Listed.

16. Other Information

Further information HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings
Health: 3*
Flammability: 0
Physical hazard: 0

NFPA ratings
Health: 3
Flammability: 0
Instability: 0

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