



Safety Data Sheet

Monopole, Inc.

Product Name: MONOCHEM 45 PART A

Issue Date: August 2018

Monopole Inc. encourages and expects you to read and understand the entire SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

SECTION 1: Identification

Product Name: MONOCHEM 45 (Part A)

Product Code: 4545

COMPANY IDENTIFICATION

Monopole, Inc.
4661 Alger Street
Los Angeles, CA 90039
Tel: (818) 500-8585
Fax: (818) 502-0818

EMERGENCY TELEPHONE NUMBERS:
Health emergency : (818) 500-8585
Poison center..... : (800) 222-1222
Chemtrec..... : (800) 424-9300

SECTION 2: Hazard Identification

Hazard Classification

This material is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

GHS Classification

Skin Irritation	Category 2
Eye Irritation	Category 2A
Skin sensitization	Sub-Category 1B
Acute Aquatic Toxicity	Category 2
Chronic Aquatic Toxicity	Category 2

GHS Label Elements

Hazard pictograms:



Single word: **WARNING!**

Hazard statements:	Causes skin irritation.
	May cause an allergic skin reaction.
	Causes serious eye damage.
	Toxic to aquatic life with long lasting effects.

Precautionary statements:

Prevention:

Do not breathe dust, mist, gas, vapors or spray.

Wash skin thoroughly after handling.
 Contaminated work clothing should not be allowed in the workplace.
 Avoid release into the environment.
 Wear protective gloves, protective clothing and eye protection/face protection.

Response:

IF ON SKIN: Wash with plenty of soap and water.
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 If skin irritation or rash occurs: Get medical advice/ attention.
 If eye irritation persists: Get medical advice/ attention.
 Take off contaminated clothing and wash before use.
 Collect spillage.

Disposal:

Dispose of contents/ container to an approved waste disposal plant.

Other Hazards

No data available.

SECTION 3: Composition/Information on Ingredients

Hazardous Components	% (by weight)	CAS#	Classification
Bisphenol A, epoxy resin	> 70%	25085-99-8	Skin Irritation - Category 2 Eye Irritation - Category 2A Skin Irritation - Category 2A Skin Sensitization - 1B Acute Aquatic Toxicity - Category 2 Chronic Aquatic Toxicity - Category 2
Glycidyl Ether	5%	120547-52-6	Skin Irritation - Category 2 Eye Irritation - Category 2A Skin Sensitization - Category 1
Trimethylolpropane triacrylate	5%	15625-88-5	Skin Irritation - Category 2 Eye Irritation - Category 2A Skin Sensitization - Category 1 Acute Aquatic Toxicity - Category 2

SECTION 4: First Aid Procedures

Inhalation: Move person to fresh air, if affects occur, consult a physician.

Skin Contact: Remove material from skin immediately by washing with soap and plenty of water. Remove contaminated clothing and shoes while washing. Seek medical attention if irritation persists. Wash clothing before reuse. Discard items which cannot be decontaminated, including leather articles such as shoes, belts, and watchbands.

Eye Contact: Immediately flush eyes with plenty of water, preferably lukewarm. Remove contact lenses after the initial 1-2 and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist. Suitable emergency eye wash facility should be available in work area.

Ingestion: No emergency medical treatment necessary.

SECTION 5: Fire Fighting Measures

Suitable Extinguishing Media: Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Alcohol resistant foams (ATC type) are preferred.

Unsuitable Extinguishing Media: Do not use direct water stream. May spread fire.

Hazardous Combustion Products: Phenolics. Carbon monoxide. Carbon dioxide.

Unusual Fire and Explosion Hazards: Container may rupture from gas generation in a fire situation.

Special Protective Equipment for Firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective firefighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during fire fighting operations.

SECTION 6: Accidental Release Measures

Personal Precautions: Isolate area. Keep unnecessary and unprotected personnel from entering the area.

Environmental Precautions: Prevent from entering into soil, ditches, sewers, waterways, and/or groundwater.

Methods and Materials for Containment and Cleaning Up: Contain spilled material if possible. Absorb with materials such as: Sand. Polypropylene fiber products. Remove residual with soap and hot water.

SECTION 7: Handling and Storage

Precautions for Safe Handling: Avoid prolonged or repeated contact with skin. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.

Storage Temperature: 40 - 100 °F

SECTION 8: Exposure Controls / Personal Protection

Exposure Controls

Engineering Controls: Use local exhaust ventilation, or other engineering controls to maintain airborne levels. General ventilation should be sufficient for most operations.

Individual Protective Measures

Respiratory Protection: Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements. Wear respiratory protection when adverse effects, such

as respiratory irritation or discomfort have been experienced. If material is sprayed, use an approved air-purifying respirators: Organic vapor cartridge with a particulate pre-filter.

Hand Protection: Permeation resistant gloves. Butyl rubber gloves. Nitrile rubber gloves.

Eye Protection: Chemical safety goggles and side shield.

Skin Protection: Permeation resistant clothing. Gloves, long sleeved shirts and pants.

SECTION 9: Physical and Chemical Properties

Boiling Point: 600°F

Specific Gravity: (H₂O=1): 1.16 G/Cm³

V.O.C. (Combined Part A & Part B): 13 G/L

Solubility in Water: Insoluble.

Appearance and Odor: Light Yellow Liquid, Slight Odor

Flash Point: 330°F (165°C)

Viscosity: 14,000 Mpa.S

SECTION 10: Stability and Reactivity

Hazardous Reactions: Hazardous polymerization does not occur.

Stability: Stable under normal conditions.

Conditions to Avoid: Excessive heat or high temperatures.

Incompatibility (Materials to Avoid): Oxidizing materials, acids, bases, amines.

Hazardous Decomposition Products: Decomposition products depend upon temperature and the presence of other materials. Gases are released during decomposition. Uncontrolled exothermic reaction of epoxy resins release phenolics, carbon monoxide and water.

SECTION 11: Toxicological Information

Likely Routes of Exposure: Inhalation, Skin, Eye, Ingestion.

Acute Toxicity

Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.

Prolonged skin contact is unlikely to result in absorption of harmful amounts.

At room temperature, exposure to vapor is minimal due to low volatility. Vapor from heated material, mist or aerosols may cause respiratory irritation.

Skin Corrosion/Irritation

Prolonged contact may cause skin irritation with local redness.

Repeated contact may cause skin irritation with local redness.

Serious Eye Damage/Eye Irritation

May cause eye irritation.

Corneal injury is unlikely.

Sensitization

For similar material(s):
Has caused allergic skin reactions in humans.
Has demonstrated the potential for contact allergy in mice.

Carcinogenicity

May studies have been conducted to assess the potential carcinogenicity of diglycidyl ether of bisphenol A (DGEBA). The most recent review by IARC has concluded that DGEBA is not classified as a carcinogen.

Reproductive Toxicity

In animal studies, did not interfere with reproduction.

SECTION 12: Ecological Information

Material is moderately toxic to aquatic organisms on an acute basis.

This material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions.

Bioconcentration potential is moderate.

Potential for mobility in soil is low.

SECTION 13: Disposal Information**Disposal Method**

Do not dump into any sewers, on the ground, or into any body of water. All disposal practices must be in compliance with all Federal, State and local laws and regulations.

Unused & Uncontaminated Product

The preferred options include sending to a licensed, permitted incinerator or other thermal destruction device.

SECTION 14: Transportation Information

DOT Proper Shipping Name: Not regulated.

IATA Proper Shipping Name:

Environmentally Hazardous Substance, Liquid, N.O.S. (Epoxy Resin)

UN Number: UN 3082

Class: 9

Packing Group: III

IMO Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Epoxy Resin)

UN Number: UN 3082

Class: 9

Packing Group: III

Marine Pollutant: Epoxy Resin

SECTION 15: Regulatory Information

OSHA Hazard Communication Standard

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substance Control Act: All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986): To the best of our knowledge, this product does NOT contain any of the listed chemicals, which the state of California has found to cause cancer, birth defects, or other reproductive harm.

U.S. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) Section 311/312: Acute Health Hazard

Superfund Amendments and Reauthorization Act of 1986 Title III (EPCRA) Section 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold reporting levels established by SARA Title III, Section 313.

SECTION 16: Other Information

Hazard Rating System

NFPA

Health	Fire	Reactivity
1	1	2

USER'S RESPONSIBILITY: A bulletin such as this cannot be expected to cover all possible individual situations. As the user has the responsibility to provide a safe workplace, all aspects of an individual operation should be examined to determine if, or where, precautions, in addition to those described herein, are required. Any health hazard and safety information herein should be passed on to your customers or employees, as the case may be.

DISCLAIMER: To the best of our knowledge, the information contained herein is accurate, but no representation, guarantee or warranty, expressed or implied, is made as to the accuracy, reliability or completeness of the information. All chemicals may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. Monopole Inc. urges persons receiving this information to make their own determination as to the information's suitability and completeness for their particular application. It is the responsibility of the user to comply with all applicable federal, state, and local laws and regulations.



Safety Data Sheet

Monopole, Inc.

Product Name: MONOCHEM 45 PART B

Issue Date: August 2018

Monopole Inc. encourages and expects you to read and understand the entire SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

SECTION 1: Product and Company Identification

Product Name: MONOCHEM 45 (Part B)

COMPANY IDENTIFICATION

Monopole, Inc.
4661 Alger Street
Los Angeles, CA 90039
Tel: (818) 500-8585
Fax: (818) 502-0818

EMERGENCY TELEPHONE NUMBERS:

Health Emergency : (818) 500 - 8585
Poison Center..... : (800) 222 - 1222
Chemtrec..... : (800) 424 - 9300

SECTION 2: Hazard Identification

GHS Classification

Acute Toxicity (Oral): Category 4
Skin Corrosion: Category 1C
Serious Eye Damage: Category 1
Skin Sensitization: Category 1
Reproductive Toxicity: Category 2

GHS Label Elements

Hazard pictograms:



Single word: Danger

Hazard statements: Harmful if swallowed.
Harmful in contact with skin.
Suspected of damaging fertility or the unborn child.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
May cause damage to organs if swallowed.

Precautionary Statements:

Prevention: Do not breathe dust, fume, mist, gas, vapors or spray.
Wear protective gloves/clothing/eye protection/face protection.

Wash hands thoroughly after handling.
Do not handle until all safety precautions have been read and understood.
Do not eat, drink, or smoke when using this product.
Contaminated work clothing should not be allowed out of the workplace.
Use personal protective as required.

Response: IF SWALLOWED: Rinse mouth. Do not induce vomiting. Call a Poison Center or doctor/physician if you feel unwell.
IF ON SKIN: Remove/take off immediately all contaminated clothing. Rinse skin with water/ shower.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses.
If exposed or concerned: get medical attention/advice.
Immediately call a Poison Center or doctor/physician.
If skin irritation or rash occurs: get medical attention.
Wash contaminated clothing before use.

Storage: Store locked up.
Storage temperature: 32°F - 100°F.

Disposal: Dispose of contents and container in accordance with existing federal, state, and local environmental control laws.

SECTION 3: Composition/Information on Ingredients

Hazardous Components	% (by weight)	CAS#
Cycloaliphatic amine	30%	
Alcohol	< 45%	
Tertiary amine	2-5%	

**The remaining components are trade secret.*

SECTION 4: First Aid Measures

General Advice: Seek medical advice. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately.

Eye Contact: In case of contact, hold eyelids apart, initiate and maintain gentle and continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour.

Skin Contact: Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. Flush immediately with copious amounts of water. Initiate and maintain continuous

irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour. Cover wound with sterile dressing.

Inhalation: Move to an area free from further exposure. Get medical attention immediately. If breathing has stopped or is labored, give assisted respirations.

Ingestion: Do not induce vomiting. Wash mouth out with water. Do not give anything by mouth to an unconscious person. Get medical attention.

Treatment - Note to Physicians: Application of corticosteroid cream has been effective in treating the skin irritation.

SECTION 5: Fire Fighting Measures

Suitable Extinguishing Media: Alcohol-resistant foam.
Carbon Dioxide (CO_2).
Dry Chemical.
Dry Sand.
Limestone powder.

Specific Hazards: Incomplete combustion may form carbon monoxide.
May generate ammonia gas.
May generate toxic nitrogen oxide gases.
Burning produces noxious and toxic fumes.
Downwind personnel must be evacuated.

Special Protective Equipment: Avoid contact with skin.
A face shield should be worn.
Use personnel protective equipment.
Wear self-contained breathing apparatus for firefighting if necessary.

Further Information: Do not allow run-off from firefighting to enter drains or water courses.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures: Use self-contained breathing apparatus and chemically protective clothing. Evacuate personnel to safe areas.

Initial Containment: Dike spill. Prevent material from entering sewers, waterways, soil or low areas.

Steps To Be Taken In Case Material Is Released Or Spilled: Contain spilled product. Absorb with materials such as: sand, polypropylene or polyethylene fiber products. Collect in suitable and properly labeled containers. Remove residual using hot soapy water.

SECTION 7: Handling and Storage

Handling: Use only in well-ventilated areas. Avoid breathing vapors or mist. Avoid contact with eyes, skin, or clothing. Wash skin and hands thoroughly after handling. Wash clothing after use. Do not store or consume food, drink, or tobacco in areas where they may become contaminated with this material.

Storage: Store indoors at temperatures: 34°F - 120°F

Keep from freezing – product stability may be affected. Stir well before use. Keep container tightly closed in a dry, cool and well-ventilated place. Do not store near acids.

Precautions to Be Taken In Handling and Storage: Store in tightly sealed containers to protect from atmospheric moisture. Store in a cool dry area.

SECTION 8: Exposure Controls and Personal Protection

ENGINEERING CONTROLS

Provide readily accessible eye wash stations and safety showers.

Provide natural or explosion-proof ventilation adequate to ensure concentrations are kept below exposure limits.

PERSONAL PROTECTION

Eye/Face Protection: Wear chemical tight goggles and full-face shield. Eye protection worn must be compatible with respiratory protection system employed.

Hand Protection: The impervious glove(s) listed below may provide protection against permeation. (Gloves of other chemically resistant materials may not provide adequate protection): Butyl-rubber, neoprene or nitrile rubber gloves.

Respirator Protection: Avoid breathing vapor or mists. Wear appropriate respirator when ventilation is inadequate.

Protective Clothing: Where there is potential for skin contact have available and wear as appropriate impervious gloves, apron, pants, and jacket. Gloves determined to be impervious under the conditions of use should be worn always when working with this product. Wash contaminated clothing before re-wearing.

Other Protective Equipment and Measures:

Unhindered access to safety shower and eye wash stations. As a general hygienic practice, wash hands and face after use. Showers and cleaning of clothes are recommended.

SECTION 9: Physical / Chemical Properties

Boiling Point: 400°F

Specific Gravity: (H₂O=1): No available data.

V.O.C. (Combined Part A & Part B): 13 g/L

Solubility in Water: No available data.

Appearance And Odor: Light yellow liquid, slight ammonia odor

Flash Point: 200°F

SECTION 10: Stability & Reactivity Data

Stability: Stable under normal conditions.

Materials To Avoid: Reactive metals (e.g. sodium, calcium, zinc etc.). Materials reactive with hydroxyl compounds.

CAUTION! N-Nitrosamines, many of which are known to be potent carcinogens, may be formed when the product comes in contact with nitrous acid, nitrites or atmospheres with high nitrous oxide concentrations.

Nitrous acid and other nitrosating agents.

Organic acids (i.e. acetic acid, citric acid etc.).

Mineral acids.

Sodium hypochlorite.

Product slowly corrodes copper, aluminum, zinc and galvanized surfaces.

Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion.

Oxidizing agents.

Hazardous Decomposition

Products:

Nitric acid,

Ammonia,

Nitrogen oxides (NO_x),

Nitrogen oxide can react with water vapors to form corrosive nitric acid.

Carbon monoxide,

Carbon dioxide (CO₂),

Aldehydes,

Flammable hydrocarbon fragments

Nitrosamine

Conditions to Avoid: Keep from freezing. Avoid heat, open flame, sparks and moisture.

Hazardous Reactions: No data available.

SECTION 11: Toxicological Information

LIKELY ROUTES OF EXPOSURE

- Effects on Eye:** Corneal edema may give rise to a perception of "blue haze" or "fog" around lights. Exposed individuals may see rings around bright lights. This effect is temporary and has no known residual effect. Product vapor can cause glaucopsia (corneal edema) when absorbed into the tissue of the eye from the atmosphere. Causes eye burns. May cause blindness.
- Effects on the Skin:** Causes skin burns. If absorbed through skin, may cause central nervous system effects, such as headache, nausea, dizziness, confusion, and breathing difficulties.
- Inhalation Effects:** Can cause severe eye, skin and respiratory tract burns. Inhalation of aerosol may cause irritation to the upper respiratory tract. In high concentrations may cause asphyxiation. Symptoms may include loss of mobility/consciousness. Victim may not be aware of asphyxiation. Risk of serious damage to the lungs (by inhalation).
- Ingestion Effects:** If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach. Harmful if swallowed.
- Symptoms:** Headache, dizziness, tiredness, nausea, and vomiting.

ACUTE TOXICITY

- Acute Oral Toxicity:** No data is available on the product itself.
- Acute Inhalation:** No data is available on the product itself.
- Acute Dermal Toxicity:** No data is available on the product itself.
- Skin Corrosion/Irritation:** Causes skin burns.
- Serious Eye Damage/Eye Irritation:** Risk of serious damage to eyes.
- Sensitization:** May cause sensitization by skin contact.

CHRONIC TOXICITY OR EFFECTS FROM LONG TERM EXPOSURES

- Carcinogenicity:** No data available.
- Reproductive Toxicity:** No data available.
- Germ Cell Mutagenicity:** No data available.
- Specific target organ toxicity:** No data available.

This product contains no listed carcinogens according to IARC, ACGIH, NTP, and/or OSHA in concentrations of 0.1 percent or greater. May cause: Allergic skin reaction, adverse reproductive effects.

SECTION 12: Ecological Information

Ecotoxicity Effects: No data is available.

PERSISTANCE AND DEGRADABILITY

Biodegradability: No data is available on the product itself.

Bioaccumulation: Low bioaccumulation potential.

SECTION 13: Disposal Considerations

Waste from Residues/Unused Products: The product should not be allowed to enter drains, water courses, or the soil. Dispose of this material and its container in a safe way. Contact supplier if guidance is required.

Contaminated Packaging: Dispose of container and unused contents in accordance with federal, state, and local requirements.

SECTION 14: Transport Information

DOT Proper Shipping Name: Not regulated for quantities below 1000 pounds.

IATA Proper Shipping Name: Amines

UN Number: UN 2735

Class: 8

Packing Group: III

Label: 8

Marine Pollutant: Yes

IMDG Proper Shipping Name: Amines

UN Number: UN 2735

Class: 8

Packing Group: III

Label: 8

SECTION 15: Regulatory Information

Toxic Substance Control Act: Included on inventory.

EPA SARA Title III Section 312 (40 CFR 370) Hazard Classification: Acute Health Hazard.

EPA SARA Title III Section 313 (40 CFR 372) Component(s) above 'de minimus' level': None.

CALIFORNIA PROPOSITION 65 (Safe Drinking Water and Toxic Enforcement Act of 1986): To the best of our knowledge, this product does NOT contain any of the listed chemicals, which the state of California has found to cause cancer, birth defects, or other reproductive harm.

SECTION 16: Other Information

HMIS Rating:

Health: 3

Flammability: 1

Physical Hazard: 0

User's Responsibility: A bulletin such as this cannot be expected to cover all possible individual situations. As the user has the responsibility to provide a safe workplace, all aspects of an individual operation should be examined to determine if, or where, precautions, in addition to those described herein, are required. Any health hazard and safety information herein should be passed on to your customers or employees, as the case may be.

Disclaimer: To the best of our knowledge, the information contained herein is accurate, but no representation, guarantee or warranty, expressed or implied, is made as to the accuracy, reliability or completeness of the information. All chemicals may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. Monopole Inc. urges persons receiving this information to make their own determination as to the information's suitability and completeness for their particular application. It is the responsibility of the user to comply with all applicable federal, state, and local laws and regulations.