



Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Dyna-Plex 21C Mac-Cool 532-T

Metalworking fluid

Product Code: 14833

Miller Industrial Fluids, A PetroChoice Company

1751 W. Raymond Street

Indianapolis, Indiana 46221

Website: www.petrochoice.com

1-317-634-7300 Telephone

1-800-424-9300 US, Canada, Puerto Rico, Virgin Island - Emergency telephone (CHEMTREC)

+1-703-527-3887 International / Maritime Emergency telephone (CHEMTREC)

2. HAZARDS IDENTIFICATION

OSHA/HCS Status:

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture:

Serious Eye Damage/Eye Irritation – Category 2A
Skin Sensitization – Category 1

GHS Label Elements

Hazard Pictogram:



Signal Word:

WARNING

Hazard Statement:

H319 – Causes serious eye irritation
H317 – May cause an allergic skin reaction

Precautionary Statements

- Prevention:** Wear eye protection/face protection. Wash hands and other exposed areas thoroughly after handling. Avoid breathing gas, mist, vapors or spray. Wear protective gloves. Contaminated work clothing must not be allowed out of the workplace.
- Response:** 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 attention. If on skin: Wash with plenty of soap and water. If skin irritation or rash occurs, get medical advice or attention. Wash contaminated clothing before reuse.
- Storage:** None
- Disposal:** Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Other Hazards:** None known

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name: None

Formula: Mixture

Other means of identification: None

CAS Number/other identifiers: None

| Component | CAS Number | Concentration % |
|---|----------------|-----------------|
| Petroleum distillates, hydrotreated heavy naphthenic | 64742-52-5 | 40-50 |
| Sodium sulfonate | Confidential** | 5-10 |
| 2-Amino-2-methyl-1-propanol | 124-68-5 | 1-5 |
| Alkanolamide | Confidential** | 1-5 |
| 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol | 4719-04-4 | 1-5 |
| 2,5-Bis(octylidithio)-1,3,4-thiadiazole | 13539-13-4 | 0.1-1 |

*Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**The specific chemical identity has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of necessary first aid measures:

Eye Contact:

Rinse immediately with plenty of water for at least 15 minutes. Remove contact lenses, if safe and possible to do. Protect unharmed eye. Keep impacted eye(s) wide open while rinsing. If irritation persists, seek medical attention.

Inhalation

Move person to an area with fresh air. If breathing has stopped, give artificial respiration and call for emergency services immediately.

Skin contact

Take off contaminated clothing and shoes immediately. Wash off with plenty of soap and water. If skin irritation or rash occurs, get medical attention.

Ingestion

Rinse mouth with plenty of water and drink plenty of water afterwards. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If large quantities are swallowed, call a physician immediately.

Most Important Symptoms/Effects, Acute and Delayed: May cause irritation to the eyes.

Indication of any immediate medical attention and special treatment needed:

If necessary, treat symptomatically

5. FIREFIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

In case of fire, use water spray (fog), foam, dry chemical or CO₂.

Unsuitable extinguishing media

None known.

Specific hazards arising from this mixture

Thermal decomposition products include oxides of carbon, phosphorus, sulfur and nitrogen.

Special protective equipment and precautions for fire-fighters

Wear helmet, self-contained positive pressure or pressure-demand breathing apparatus, protective clothing and face mask.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Methods and materials for containment and cleaning up

Stop the flow of material, if this is without risk. Dike the spilled material, where possible. Absorb with an inert absorbent material and place in a suitable container for disposal. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

Environmental precautions

Do not let product enter drains, sewer, rivers or lakes.

7. HANDLING AND STORAGE

Precautions for safe handling

Wash hands after handling and before eating. Do not get this material in contact with eyes. Remove and wash contaminated clothing promptly. Conditions for safe storage

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits

OSHA

| Material | Type | Value |
|--|------|---------------------|
| Petroleum distillates, hydrotreated heavy naphthenic | PEL | 5 mg/m ³ |
| 2-Aminoethanol | PEL | 6 mg/m ³ |

ACGIH

| Material | Type | Value |
|--|------|-----------------------|
| Petroleum distillates, hydrotreated heavy naphthenic | TWA | 5 mg/m ³ |
| 2-Aminoethanol | TWA | 7.5 mg/m ³ |

NIOSH

| Material | Type | Value |
|--|------|----------------------|
| Petroleum distillates, hydrotreated heavy naphthenic | STEL | 10 mg/m ³ |
| 2-Aminoethanol | STEL | 15 mg/m ³ |

Appropriate engineering controls:

Adequate ventilation should be provided whenever the material is heated or mists are generated. Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

Individual protection measures, such as personal protective equipment:

Eye/face protection

Goggles/face shield are recommended.

Hand protection

Neoprene or nitrile rubber gloves are recommended.

Skin protection & body protection

Chemical resistant long-sleeve clothing is recommended. Launder contaminated clothing before reuse.

Respiratory protection

If vapors/mist concentration exceed the exposure limit(s), an appropriate certified respirator must be used.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Amber

Physical state: Liquid

Odor: Mild

Odor Threshold: Not available

pH: 10.5 (5% solution)

Melting point/freezing point: 32°F (0°C)

Initial boiling point and boiling range: 490°F (254.4°C)

Flash point (Cleveland Open Cup): >300°F (148.9°C)

Evaporation rate: Not available

Flammability (solid, gas): Not available

Lower/upper flammability or explosive limits:

Flammability Limit

Lower %: Not available

Upper %: Not available

Explosive Limit:

Lower %: Not available

Upper %: Not available

Vapor pressure: Not available

Vapor density: Not available

Relative density: 0.94 @ 60°F (15.56°C)

Solubility (water): Miscible

Partition Coefficient (n-octanol/water): Not available

Auto-ignition Temperature: Not available

Decomposition Temperature: Not available

Viscosity: 100 cSt @ 104°F (40°C)

10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical stability: Stable under recommended storage conditions

Possibility of hazardous reactions: Hazardous polymerization will not occur

Conditions to avoid: Temperatures above the flash point.

Incompatible materials: Strong acids and oxidizing agents

Hazardous decomposition products: Decomposition products include oxides of carbon, sulfur phosphorous, and nitrogen.

11. TOXICOLOGICAL INFORMATION

Information on the likely routes of exposure:

- Ingestion:** May cause gastrointestinal irritation and discomfort if swallowed. Do not induce vomiting. Vomiting may increase risk of product aspiration.
- Inhalation:** May be harmful if inhaled. However, this product does not meet the criteria for classification.
- Skin Contact:** Frequent or prolonged contact may defat and dry the skin.
- Eye Contact:** May cause irritation of the eyes.

Symptoms related to the physical, chemical and toxicological characteristics: Not available

Information on Toxicological Effects

Acute Toxicity:

| Product/ingredient name | Result | Species | Dose |
|---|-----------|---------|-----------------|
| Sodium Sulfonate | LD50 Oral | Rat | >5000 mg/kg |
| 2-Amino-2-methyl-1-propanol | LD50 Oral | Rat | 2900 mg/kg |
| Diisopropanolamine | LD50 Oral | Rat | >2000 mg/kg |
| 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol | LD50 Oral | Rat | 1009-3950 mg/kg |

Skin Corrosion/Irritation: Frequent or prolonged contact may defat and dry the skin.

Serious Eye Damage/Eye Irritation: May be irritating to the eyes.

Respiratory or Skin Sensitization:

Respiratory Sensitization: No data available

Skin Sensitization: May cause an allergic skin reaction. Once sensitized, exposure to very small levels may cause a severe allergic reaction.

Mutagenicity: No data available

Carcinogenicity: No data available

Reproductive Toxicity: No data available.

Specific Target Organ Toxicity:

Single Exposure: Not classified

Repeated Exposure: Not classified

Aspiration hazard:

| Component Name | Result |
|--|--------------------------------|
| Petroleum distillates, hydrotreated heavy naphthenic | ASPIRATION HAZARD - Category 1 |

12. ECOLOGICAL INFORMATION

Ecotoxicity:

| Component | Test | Species | Dose |
|---|-----------|---------------------|-------------|
| 2-Amino-2-methyl-1-propanol | LC50, 96h | Lepomis macrochirus | 190 mg/L |
| 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol | LC50, 96h | Fish | 10-100 mg/L |

Persistence and Degradability: No data available

Bioaccumulative Potential: No data available

Mobility in Soil: No data available

Other Adverse Effects: No known significant effects or critical hazards.

13. DISPOSAL CONSIDERATIONS

Waste Disposal methods

Disposal of waste material should comply with all local, state, federal and provincial environmental regulations. See Section 7 for safe handling procedures and section 8 for personal protective equipment recommendations. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Empty containers or liners may retain some product residues. Follow label warnings even after container is emptied. Avoid contact of any spilled material or runoff with soil, waterways, drains and sewers.

14. TRANSPORT INFORMATION

DOT: Not regulated

IMDG: Not regulated

15. REGULATORY INFORMATION

U.S. Federal Regulations

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

United States inventory (TSCA 8b): All components are listed or exempted.

SARA 302/304:

Composition/Information on Ingredients

No products were found

SARA Hazard Categories (311/312)

Acute Health Hazard: Yes

Chronic Health Hazard: No

Fire Hazard: No

Sudden Release of Pressure Hazard: No

Reactive Hazard: No

SARA 313:

This material does not contain any chemical components that exceed the threshold reporting levels established by SARA Title III, Section 313.

State Regulations

Massachusetts: The following components are listed: Ethanolamine

New Jersey: The following components are listed: Ethanolamine; Ethanol, 2-amino-

Pennsylvania: The following components are listed: Ethanol, 2-amino-; 2-Amino-2-methyl-1-propanol.

California Proposition 65

This product does not contain any chemicals known to the State of California to cause cancer, birth defects or reproductive harm.

16. OTHER INFORMATION

The information and recommendations contained within this document are believed by PetroChoice to be accurate and reliable as of the date prepared. The information and recommendations are offered for the user's consideration and analysis and in no way guarantee the chemical specifications for the specified product. It is solely the responsibility of the user to determine safe conditions for use of this product and to assume liability for any loss, damage or expense arising out of the product's improper use. The user should consider the information in this document in the context of how the selected product will be handled and used in conjunction with other products. It is the user's responsibility to determine that the product is suitable for the intended use.

Appropriate warnings and safe-handling procedures should be provided to all handlers and users. PetroChoice assumes no responsibility for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices within this document.

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