



SAFETY DATA SHEET

Issue Date 01-31-2018

Revision Date 01-31-2018

Version 3

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name: COOLING-SYSTEM FAST FLUSH

Other means of identification

Common Name: 0109
UN/ID No Not Regulated
Synonyms None
Product Categories Automotive Coolant System Cleaner

Recommended use of the chemical and restrictions on use

Sale and Use Restrictions Not applicable
Recommended Use Restricted to professional users.
Uses advised against Consumer use

Details of the supplier of the safety data sheet

Supplier Address
MOC PRODUCTS CO., INC.
12306 Montague Street
Pacoima, CA 91331

Emergency telephone number

Company Phone Number MOC PRODUCTS CO., INC. (818) 794-3500
Emergency Telephone CHEMTREC 1-800-424-9300

2. HAZARDS IDENTIFICATION**Classification**

| | |
|-----------------------------------|-------------|
| Skin corrosion/irritation | Category 2 |
| Serious eye damage/eye irritation | Category 2A |

Label elements**Emergency Overview****Warning****Hazard statements**

Causes skin irritation

Causes severe eye irritation

**Appearance** Aqueous solution**Physical state** Liquid**Odor** Mild**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Specific treatment (see response statements below and Section 4 of the Safety Data Sheet)

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

IF ON SKIN: Wash with plenty of soap and water

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash before reuse

Hazards not otherwise classified (HNOC)**Other information**

11.16 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS Number | Weight % | Trade Secret |
|---------------------|------------|----------|--------------|
| Triammonium citrate | 3458-72-8 | 10-20 | * |

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

| | |
|---------------------|---|
| Skin contact | Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/ attention. |
| Inhalation | If affected, remove to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration. Call a physician or Poison Control Center immediately. |
| Eye contact | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If symptoms persist, call a physician. |
| Ingestion | If swallowed, rinse mouth with water (only if the person is conscious). Never give anything by mouth to an unconscious person. Obtain medical attention. |

Most important symptoms and effects, both acute and delayed

Symptoms Skin irritation, Eye irritation, Respiratory irritation.

Indication of any immediate medical attention and special treatment needed

Self-protection of the first aider Avoid contact with skin.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

Use dry chemical, CO₂, water spray (fog) or alcohol resistant foam.

| | |
|------------------------------|---|
| Small Fire | Dry chemical or CO ₂ . |
| Large Fire | Water spray or fog, Alcohol resistant foam. |
| Explosive properties: | Not an explosive. |

Specific hazards arising from the chemical

The product causes irritation of eyes, skin and mucus membranes.

Hazardous combustion products Carbon monoxide, Carbon dioxide (CO₂), Nitrogen oxides (NO_x), Ammonia.

Specific methods:

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Special firefighting procedures:

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions: Avoid contact with skin and eyes. Ensure adequate ventilation. Avoid dust formation. See Section 8 for information on appropriate personal protective equipment.

For emergency responders Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions: Do not let product enter drains. Avoid subsoil penetration.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for clean-up: Ventilate the area. Avoid dust formation. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to state, local, federal regulations. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE**Precautions for safe handling**

Handling: Do not get in eyes, on skin, or on clothing. Keep only in the original container in a cool, well-ventilated place. Avoid prolonged or repeated contact with skin. Avoid formation of dust and aerosols.

Conditions for safe storage, including any incompatibilities

Technical measures/precautions: Local exhaust. Eye wash and safety shower should be easily accessible.

Materials to avoid: Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters**

Exposure Guidelines This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies:

| Chemical Name | ACGIH TLV | OSHA Exposure Limits: | NIOSH IDLH |
|----------------------------------|-----------|-----------------------|------------|
| Triammonium citrate 3458-72-8 | - | Not established | - |

Appropriate engineering controls

Engineering measures: Ensure adequate ventilation. Eye wash and safety shower should be easily accessible.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear normal work clothing. Chemical resistant gloves. (consult with the specific manufacturer to confirm performance).

Respiratory protection No personal respiratory protective equipment normally required. Dried product, Effective dust mask. Recommended Use: N95 (US), P1 (EN143). Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice. When using do not eat, drink or smoke. Use personal protective equipment as required. Avoid contact with eyes, skin and clothing. Wash face, hands and any exposed skin thoroughly after handling. Take off contaminated clothing and wash it before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

| | | | |
|----------------|------------------|----------------|--------------------------|
| Physical state | Liquid | Odor | Mild |
| Appearance | Aqueous solution | Odor threshold | No information available |
| Color | Pale Yellow | | |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|-------------------------------|--------------------------------|-------------------------|
| pH | 6.6 - 7.1 | |
| Melting point/freezing point | < 0 °C / 32 °F | |
| Boiling point / boiling range | > 100 °C / 212 °F | |
| Flash point | No information available . / . | Not applicable |
| Evaporation rate | Slower than ether | Slower than ether |
| Flammability (solid, gas) | No information available | |
| Flammability Limits in Air | | |
| Upper flammability limit | No Data Available | |
| Lower flammability limit | No Data Available | |
| Vapor pressure | No Data Available | |
| Vapor density | Heavier than air | |
| Specific Gravity | 1.06 | |
| Water solubility | Soluble in water | |
| Solubility in other solvents | No Data Available | |
| Partition coefficient | No Data Available | |
| Autoignition temperature | No Data Available | |
| Decomposition temperature | No Data Available | |
| Kinematic viscosity | No information available | |
| Dynamic viscosity | No Data Available | |
| Explosive properties | No Data Available | |
| Oxidizing properties | No Data Available | |

Other information

| | |
|------------------|-------------------|
| Softening point | No Data Available |
| Molecular weight | No Data Available |
| VOC Content (%) | |
| VOC Content (%) | Negligible |
| Density | 1.06 g/cc |
| Bulk density | No Data Available |

10. STABILITY AND REACTIVITY**Reactivity**

Reactivity Stable: Stable under normal conditions.

Chemical stability

| | |
|------------------------------------|--|
| Possibility of Hazardous Reactions | None under normal processing. |
| Hazardous polymerization | Hazardous polymerization does not occur. |

Conditions to avoid

No information available.

Incompatible materials**Materials to avoid:** Strong oxidizing agents.**Hazardous Decomposition Products****Hazardous Decomposition Products** Carbon monoxide, Carbon dioxide (CO₂), Nitrogen oxides (NO_x), Ammonia.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure**

| | |
|----------------------------|--|
| Product Information | Causes skin irritation. Causes severe eye irritation. |
| Inhalation | May be harmful if inhaled. Causes respiratory tract irritation. |
| Eye contact | Causes severe eye irritation. Avoid contact with eyes. |
| Skin Contact | May be harmful if absorbed through skin. Causes skin irritation. |
| Ingestion | May be harmful if swallowed. |

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|----------------------------------|-----------|-------------|-----------------|
| Triammonium citrate 3458-72-8 | - | - | - |

Information on toxicological effects**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

| | |
|---------------------------------|--|
| Sensitization | No information available. |
| Mutagenic effects: | No data available to indicate product or any components present at or greater than 0.1% are mutagenic or genotoxic. |
| Carcinogenicity | No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by IARC, NTP, or OSHA. |
| Reproductive toxicity | No information available. |
| STOT - single exposure | Not classified. |
| STOT - repeated exposure | Not classified. |
| Chronic toxicity | No information available. |
| Subchronic toxicity | No information available. |
| Target Organ Effects | Eyes, Skin, Respiratory system. |
| Neurological effects | No information available. |
| Aspiration hazard | No information available. |

Numerical measures of toxicity - Product Information

| | |
|-------------------------------|--|
| Unknown Acute Toxicity | 11.16 % of the mixture consists of ingredient(s) of unknown toxicity |
|-------------------------------|--|

12. ECOLOGICAL INFORMATION**Ecotoxicity**

No Data Available.

12.27 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Persistence and degradability

No information available.

Bioaccumulation

Bioaccumulative potential.

Mobility

Soluble in water.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Dispose of in accordance with federal, state and local regulations.

Contaminated packaging Do not reuse container. Dispose of in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION

DOT Not regulated

IATA Not regulated

IMDG Not regulated

15. REGULATORY INFORMATION**International Inventories****Legend:***TSCA - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List***Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

| Chemical Name | CAS Number | Weight % | SARA 313 - Threshold Values % |
|----------------------------------|------------|----------|--------------------------------|
| Triammonium citrate 3458-72-8 | 3458-72-8 | 10-20 | 1.0 % de minimis concentration |

SARA 311/312 Hazard Categories

| | |
|-----------------------------------|-----|
| Acute health hazard | Yes |
| Chronic Health Hazard | No |
| Fire hazard | No |
| Sudden release of pressure hazard | No |
| Reactive Hazard | No |

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

State Regulations (RTK)**California Proposition 65**

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm:

| Chemical Name | CAS Number | California Proposition 65 |
|----------------|------------|---|
| Formaldehyde | 50-00-0 | Carcinogen |
| 1,4-Dioxane | 123-91-1 | Carcinogen |
| Ethylene oxide | 75-21-8 | Carcinogen Developmental Female Reproductive Male Reproductive |
| Acetaldehyde | 75-07-0 | Carcinogen |

U.S. State Right-to-Know Regulations**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION**NFPA Rating**

Health hazards 2

Flammability 0

Instability 0

Physical and Chemical Properties -

HMIS Rating

Health hazards 2

Flammability 0

Physical hazards 0

Personal protection B

Prepared by

Environmental Health and Safety Department

Issue Date

01-31-2018

Revision Date

01-31-2018

Revision Note

This data sheet contains changes from the previous version in section(s): 4, 15.

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet