

PRODUCT NAME: ABRO Radiator Flush  
PRODUCT NUMBER/SIZE: AB-505 / 12 oz.

Revision Date: 6/22/2015

**SECTION 1**  
**Identification of the Substance and of the Company/Undertaking**

MANUFACTURER'S NAME: ABRO INDUSTRIES, INC.  
ADDRESS: 3580 Blackthorn Court  
South Bend, IN 46628  
USA  
PRODUCT DESCRIPTION: Automobile cooling system flush  
COMPANY PHONE: 574-232-8289  
EMERGENCY 24-HR TELEPHONE: Chemtrec: US/Canada 1-800-424-9300  
International +1-703-527-3887

**SECTION 2**  
**Hazards Identification**

**Classification:**

Not Hazardous

**Label Pictogram(s):**

None

**Signal Word:** None

**Hazard Phrases:** None

**Precautionary Phrases:** None

**Response:** None

**Storage / Disposal:** None

**Other:** Keep out of reach of children.

**SECTION 3**  
**Composition/Information on Ingredients**

<b>COMPONENTS</b>	<b>CAS Number</b>	<b>Percent by weight</b>
Sodium Citrate	68-04-2	5-15
Water	7732-18-5	85-95

The exact concentrations are a trade secret

## SECTION 4 First Aid Measures

<b>Eyes</b>	Exposed eyes should be flushed with copious amounts of water using a steady stream for several minutes. If irritation, pain, swelling or tearing persist, seek medical attention.
<b>Skin</b>	Removed contaminated clothing immediately. Wash skin thoroughly with soap and water. Obtain medical attention if irritation occurs or persists.
<b>Inhalation</b>	Remove victim to fresh air. If irritation is experienced, move to fresh air.
<b>Ingestion</b>	If swallowed, get immediate medical advice by calling a Poison Control Center, or emergency room. If advice is not available, take victim and product container to the nearest emergency treatment center or hospital. Do not attempt to give anything by mouth to an unconscious person.
<b>Most Important Symptoms</b>	May cause slight eye and skin irritation. Ingestion may cause gastrointestinal irritation.
<b>Indication of immediate medical attention and special treatment, if needed:</b>	None known.
<b>Note to Physicians</b>	Treatment of overexposure should be directed at the control of symptoms and the clinical conditions.

## SECTION 5 Fire Fighting Measures

### **Suitable Extinguishing Media**

This product is not combustible. Use any media that is appropriate for the surrounding fire.

### **Specific Hazards Arising from Chemical**

Thermal decomposition may produce oxides of sodium and carbon.

### **Special Protective Equipment and Precautions for Firefighters**

Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored.

## SECTION 6 Accidental Release Measures

### **Personal Precautions, protective equipment and emergency procedures:**

Wear appropriate protective clothing and equipment (See Section 8).

### **Methods and materials for containment/cleanup:**

Collect with absorbent material and place in appropriate, labeled container for disposal or, if permitted flush spill area with water.

## SECTION 7 Handling and Storage

**Precautions for safe handling:**

Avoid eye, and prolonged or repeated skin contact.  
Do not reuse empty containers unless properly cleaned.

**Conditions for safe storage, including any incompatibilities:**

Store in a cool, dry area.

## SECTION 8 Exposure Controls/Personal Protection

**Exposure Guidelines**

CHEMICAL	EXPOSURE LIMIT
Sodium Citrate	None Established (PEL/TLV)
Water	None Established (PEL/TLV)

**Appropriate Engineering Controls:**

Use general ventilation or local exhaust as required to maintain exposures below the occupational exposure limits.

**Eye Protection:**

Safety glasses recommended if splashing is possible.

**Gloves:**

None normally needed. For prolonged contact rubber or neoprene gloves can be worn.

**Respiratory Protection:**

None needed under normal conditions of use.

**Other Protective Equipment/Clothing:**

Appropriate protective clothing as needed to minimize skin contact.

## SECTION 9 Physical and Chemical Properties

APPEARANCE:	Clear liquid	ODOR:	Sweet
ODOR THRESHOLD:	Not determined	pH:	7.5-9.5
MELTING/FREEZING POINT:	32°F (0°C)	BOILING POINT/RANGE:	215°F (101.7°C)
FLASH POINT:	SEPA >215°F (>101.7°C)	EVAPORATION RATE:	Not determined
FLAMMABILITY (SOLID, GAS)	Non-Flammable	FLAMMABILITY LIMITS:	LEL: Not applicable UEL: Not applicable
VAPOR PRESSURE:	Not determined	VAPOR DENSITY:	Not determined
RELATIVE DENSITY:	1.051	SOLUBILITIES	Water: 100%
PARTITION COEFFICIENT (n-octanol/water)	Not determined	AUTOIGNITION TEMPERATURE:	Not applicable
DECOMPOSITION TEMPERATURE:	Not determined	VISCOSITY(Cst @ 68°F):	~ 1

## SECTION 10 Stability and Reactivity

**Reactivity:**

Normally unreactive

**Chemical Stability:**

Stable

**Possibility of Hazardous Reactions:**

None known

**Conditions to Avoid:** None known  
**Incompatible Materials:** Strong acids, metals, flammable liquids.  
**Hazardous Decomposition:** Thermal decomposition will produce oxides of carbon and sodium.

## SECTION 11 Toxicological Information

**Potential Health Effects:**

**Acute Hazards:**

**Inhalation:** Inhalation is not expected to be hazardous. Inhalation of large amounts may of mist cause mucous membrane irritation.

**Skin Contact:** Skin contact is not expected to be hazardous. Prolonged or excessive contact may cause skin irritation and possible skin rash.

**Skin Absorption:** Not expected to be absorbed through the skin.

**Ingestion:** Ingestion of small amounts is not expected to be acutely hazardous.

Ingestion of large amounts may cause gastrointestinal irritation.

**Chronic Hazards:** None currently known.

**Carcinogenicity Listing:** None of the ingredients are listed as a carcinogen or potential carcinogen by IARC, NTP, ACGIH, or OSHA.

**ACUTE TOXICITY VALUES:**

No toxicity data available.

## SECTION 12 Ecological Information

**Ecotoxicity:** No ecotoxicity data is available at this time.

**Persistence and** No data is available at this time.

**Degradability:**

**Bioaccumulative Potential:** No data is available at this time.

**Mobility in Soil:** No data is available at this time.

**Other Adverse Effects:** None known

## SECTION 13 Disposal Considerations

Dispose of product in accordance with all local, state/provincial and federal regulations.

## SECTION 14 Transport Information

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

**U.S. DOT** UN/ID Number: Not Regulated  
Proper shipping name:  
Hazard class:  
Packing Group:  
Exceptions:

Environmental Hazards:  
Transport in Bulk:  
Special Precautions:

**IMO/IMDG** UN/ID Number: Not Regulated  
Proper shipping name:  
Hazard class:  
Packing Group:  
Exceptions:  
Environmental Hazards:  
Transport in Bulk:  
Special Precautions:

**ICAO/IATA** UN/ID Number: Not Regulated  
Proper shipping name:  
Hazard Class:  
Packing Group:  
Exceptions:  
Environmental Hazards:  
Transport in Bulk:  
Special Precautions:

**Canada (TDG)** UN/ID Number: Not Regulated  
Proper shipping name:  
Hazard class:  
Packing Group:  
Exceptions:  
Environmental Hazards:  
Transport in Bulk:  
Special Precautions:

**Europe (ADR/RID)** UN/ID Number: Not Regulated  
Proper shipping name:  
Hazard class:  
Packing Group:  
Exceptions:  
Environmental Hazards:  
Transport in Bulk:  
Special Precautions:

## SECTION 15 Regulatory Information

EPA SARA 311/312 HAZARD CLASSIFICATION: This product is not considered hazardous under OSHA and SARA Title III, Section 311.

EPA SARA 313: This Product Contains the Following Chemicals Subject to Annual Release Reporting Requirements under SARA Title III, Section 313 (40 CFR 372): None

PROTECTION OF STRATOSPHERIC OZONE: This product is not known to contain or to have been manufactured with ozone depleting substances as defined in 40 CFR Part 82, Appendix A to Subpart A.

CERCLA SECTION 103: This product is not subject to CERCLA reporting requirements, however, many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

CALIFORNIA PROPOSITION 65: This product does not contain chemicals regulated under California Proposition 65.

EPA TSCA INVENTORY: All of the components of this material are listed on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

CANADIAN ENVIRONMENTAL PROTECTION ACT: All of the ingredients are listed on the Canadian Domestic Substances List.

CANADIAN WHMIS CLASSIFICATION: Not a controlled product.

CANADIAN WHMIS HAZARD SYMBOLS: None

This SDS has been prepared according to the criteria of the Controlled Products Regulation (CPR) and the SDS contains all of the information required by the CPR.

EUROPEAN INVENTORY OF EXISTING COMMERCIAL CHEMICAL SUBSTANCES (EINECS): All of the ingredients are listed on the EINECS inventory.

AUSTRALIA: All of the ingredients of this product are listed on the Australian Inventory of Chemical Substances.

NEW ZEALAND All of the ingredients of this product are listed on the Hazardous Substance and New Organisms list (HSNO)

JAPAN: All of the ingredients of this product are listed on the Japanese Existing and New Chemical Substances (METI) List.

KOREA: All of the ingredients of this product are listed on the Korean Existing Chemical List (KECL).

CHINA. All of the ingredients of this product are listed on the Inventory of Existing Chemical Substances in China (IECSC).

PHILIPPINES: All of the ingredients of this product are listed on the Philippine Inventory of Chemical and Chemical Substance (PICCS)

**NFPA**

Health – 1

Fire – 0

Reactivity – 0

## SECTION 16 Other Information

The supplier disclaims all expressed or implied warranties of merchantability or fitness for a specific use, with respect to the product or the information provided herein, except for conformation to contracted specifications. All information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency. Conditions of use are beyond our control, and therefore

users are responsible for verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon, information contained herein.

This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process.

**ABBREVIATIONS:**

NG="NOT GIVEN"

<="LESS THAN"

ND = Not Determined

BT="BETWEEN"

>="GREATER THAN"

NA = Not Applicable