

**SAFETY DATA SHEET**

U.S. HazCom GHS Format



Date Prepared : 06/30/2015

MSDS No : TAF-RS520

**TAF Radiator Conditioner****1. PRODUCT AND COMPANY IDENTIFICATION**

**PRODUCT NAME:** TAF Radiator Conditioner  
**GENERAL USE:** Radiator Conditioner  
**PRODUCT DESCRIPTION:** Radiator Conditioner  
**PRODUCT CODE:** RS-520  
**PRODUCT FORMULATION NAME:** Radiator Conditioner & Booster  
**GENERIC NAME:** Radiator Conditioner

**MANUFACTURER**

SMB International, LLC  
 121 Highway 36  
 STE 180  
 West Long Branch, NJ 07764  
**Emergency Contact:** Responder (ESP Consulting LLC)  
**Emergency Phone:** 1-877-756-4666  
**Customer Service:** 732-222-4888  
**Transportation:** 732-222-4888 Ext.100  
**E-Mail:** msds@smbinternational.com

**DISTRIBUTOR**

KENVO TECHNOLOGY, INC  
 TENARANA AUTOMOTIVE FLUIDS  
 11543 160ST NW  
 CANADA  
 EDMONTON, AB T5M 3V9  
**Emergency Contact:** Alyssa Fowler  
**Customer Service:** 1-520-560-4766  
**E-Mail:** alyssa@kenvo.com

**24 HR. EMERGENCY TELEPHONE NUMBERS**

**Poison Control Center (Medical) :** (877) 800-5553  
**CANUTEC (Canadian Transportation) :** (613) 996-6666  
**CHEMTREC (US Transportation) :** (800) 424-9300

**2. HAZARDS IDENTIFICATION****GHS CLASSIFICATIONS****Health:**

Category 4

Skin Irritation, Category 2  
 Eye Irritation, Category 2  
 Target Organ Toxicity (Repeated exposure), Category 2

**GHS LABEL**Exclamation  
markHealth  
hazard**SIGNAL WORD:** WARNING**HAZARD STATEMENTS**

H302: Harmful if swallowed.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H373: May cause damage to organs ( state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).

## PRECAUTIONARY STATEMENT(S)

### Prevention:

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P264: Wash ... thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

### Response:

P301+P312: IF SWALLOWED: Call a POISON CENTER/ doctor/...if you feel unwell.

P330: Rinse mouth.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P302+P352: IF ON SKIN: Wash with plenty of water/...

P362: Take off contaminated clothing.

P314: Get medical advice/attention if you feel unwell.

### Disposal:

P501: Dispose of contents/container to ...

## EMERGENCY OVERVIEW

**IMMEDIATE CONCERNS: CAUTION!** May cause eye irritation. May be harmful if absorbed through the skin and if swallowed.

## POTENTIAL HEALTH EFFECTS

**EYES:** Contact may cause eye irritation.

**SKIN:** Considered irritating to the skin. Repeated contact may cause moderate to severe irritation.

**INGESTION:** Ingestion of small amounts may cause vomiting. This material presents a severe aspiration danger and may result in pulmonary edema and sever lung damage.

**INHALATION:** Dust or vapor irritating to eyes and respiratory tract.

**MEDICAL CONDITIONS AGGRAVATED:** Persons with pre-existing skin disorders, eye problems, or impaired kidney function may be more susceptible to the effects of this material.

**ROUTES OF ENTRY:** Skin, inhalation and ingestion

**TARGET ORGAN STATEMENT:** Contains material which may cause eye, skin, gastrointestinal, respiratory, nervous system, kidney and liver damage.

**IRRITANCY:** May cause irritation to the eyes, skin and respiratory system.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Vol. %	CAS
1,2-ethanediol	< 0 - 10	107-21-1
Ethanol, 2,2'-oxybis-	< 0 - 3	111-46-6
Proprietary Component	< 2.2	

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

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

#### 4. FIRST AID MEASURES

**EYES:** Rinse Immediately, flush eyes with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Also flush under the eyelids. If irritation persists. Consult a physician.

**SKIN:** Immediately remove all contaminated clothing. After contact with skin, wash immediately with plenty of water and soap. If irritation develops or persists seek medical attention. Wash contaminated clothing before re-use.

**INGESTION:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Drink plenty of water. Call a POISON CENTER or doctor/physician if exposed or you feel unwell.

**INHALATION:** Move the exposed person to fresh air at once. If breathing stops, provide artificial respiration. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention.

#### SIGNS AND SYMPTOMS OF OVEREXPOSURE

**EYES:** Burning. Red eyes. Tearing.

**SKIN:** Contact may cause skin irritation.

**INGESTION:** Toxic if swallowed. Possible effects include headache, dizziness, cramp, unconsciousness and death. Nausea Vomiting Blindness Toxic: danger of very serious irreversible effects if swallowed. Never give anything by mouth to an unconscious person or a person with cramps.

**INHALATION:** Inhalation of mist may cause nose and throat irritation and nervous system effects.

**NOTES TO PHYSICIAN:** Treat symptomatically.

#### 5. FIRE FIGHTING MEASURES

**EXTINGUISHING MEDIA:** Use carbon dioxide, dry chemical, or water fog. Do Not use water jet. Burning liquid may float on water

**HAZARDOUS COMBUSTION PRODUCTS:** Oxides of Carbon.

**FIRE FIGHTING PROCEDURES:** In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. Water spray may be used to keep fire exposed containers cool.

**FIRE FIGHTING EQUIPMENT:** Respiratory and eye protection are required for fire fighting personnel. Full protective equipment (Bunker Gear) and self contained breathing apparatus (SCBA) should be used for all indoor fires and any significant outdoor fires. For small outdoor fires, which may easily be extinguished with a portable fire extinguisher, use of a SCBA may not be required.

#### 6. ACCIDENTAL RELEASE MEASURES

**SMALL SPILL:** Avoid runoff into storm sewers and ditches which lead to waterways.

**LARGE SPILL:** Always employ the proper personal protective equipment. Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas through the use of berms. Collect liquid with explosion proof pumps if possible. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Fluorocarbon alcohol resistant foams may be applied to spill to diminish vapor and fire hazard.

#### ENVIRONMENTAL PRECAUTIONS

**WATER SPILL:** Depending on the size of the spill and the movement characteristics of the water into which it entered, consider use of booms, underflow or overflow dams. Diversion of the material is also an option. Mechanical skimmers, pads and other absorbent materials may be considered as well.

**LAND SPILL:** Construct temporary dikes of dirt, sand, or any appropriate readily available noncombustible (sawdust) material to prevent spreading of the material.

**GENERAL PROCEDURES:** Absorb with diatomaceous earth or equivalent inert material. Shovel up and dispose of at an appropriate waste disposal facility according to current applicable laws and regulations, and product characteristics at time of disposal.

## 7. HANDLING AND STORAGE

**GENERAL PROCEDURES:** Use with sufficient ventilation to keep employee exposure below recommended limits.

**HANDLING:** Handle and use in a manner consistent with good industrial/manufacturing techniques and practices. Open and handle with care. Do not handle near heat, sparks, or flames. Avoid contact with incompatible agents. Use with adequate ventilation/personal protection. Do not enter storage area that is not adequately ventilated. Metal containers used in a transfer should be bonded and grounded. Use non-sparking tools. Observe good personal hygiene after handling this material.

**STORAGE:** Keep container tightly closed in a dry, cool and well-ventilated place.

**STORAGE TEMPERATURE:** Store in closed original container. Protect from direct sun light. Do not expose to temperatures exceeding 50 C/122 F.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)							
		EXPOSURE LIMITS					
		OSHA PEL		ACGIH TLV		Supplier OEL	
Chemical Name		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
1,2-ethanediol	TWA	NL	NL	NL	NL	NL	NL
	STEL	C 50	C 125	C 50	C 127	NL	NL

**ENGINEERING CONTROLS:** If vapors, or mists are generated, provide local exhaust ventilation to prevent airborne exposure. All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94)

### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** Wear chemical splash goggles and face shield when eye and face contact is possible due to splashing or spraying of material. Maintain eye wash fountain and quick-drench facilities in work area.

**SKIN:** To prevent any contact, wear impervious protective clothing such as neoprene or butyl rubber gloves, apron, boots or whole bodysuit, as appropriate.

**RESPIRATORY:** No special precautions are necessary under normal operating conditions.

If the exposure limit is exceeded and engineering controls are not feasible, a half-face organic vapor respirator may be worn for up to ten times the exposure limit or maximum use concentration specified by the respirator supplier or regulatory agency. A full-face organic vapor respirator may be employed for use in atmospheres that contain up to 50 times the exposure limit. For emergencies or instances where the exposure levels are not known a positive- pressure, full-face piece, air supplied respirator should be employed.

**PROTECTIVE CLOTHING:** Long sleeved clothing should always be considered when handling chemical substances.

**WORK HYGIENIC PRACTICES:** Good personal hygiene practices should always be followed. Keep away from food, drink and animal feeding stuffs. When using, do not eat, drink or smoke. Hands and any other exposed area should be washed thoroughly with soap and water after contact. Regular laundering of contaminated clothing is essential to reduce indirect skin contact.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** Liquid

**ODOR:** Characteristic

**APPEARANCE:** Clear Liquid

**COLOR:** Varied Colors - (Green, Yellow, Red or Colorless)

**pH:** NA = Not Applicable

**FLASH POINT AND METHOD:** ~ 111°C (230°F) TAG CC

**VAPOR PRESSURE:** ~ 0.05 kPa at 20°C

**BOILING POINT:** ~ 170°C (338°F) to 200°C (392°F)

**FREEZING POINT:** ~ -36°C (-34°F)

**MELTING POINT:** ~ -12°C (10°F)

**SOLUBILITY IN WATER:** Completely soluble.

**EVAPORATION RATE:** Not yet Determined

**DENSITY:** ~ 1100 at 20°C

**SPECIFIC GRAVITY:** ~ 1150 kg/m<sup>3</sup> at 15°C

**VISCOSITY:** Not yet Determined

## 10. STABILITY AND REACTIVITY

**REACTIVITY:** No

**STABILITY:** This product is stable under storage at normal ambient temperatures.

**CONDITIONS TO AVOID:** Oxidizing materials.

**POSSIBILITY OF HAZARDOUS REACTIONS:** Reaction with strong oxidizers will generate heat.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Fire creates: Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

**INCOMPATIBLE MATERIALS:** Acids, Alkali metals, Ammonia, Bases, halogens, Oxidizing agents, sodium, Sulphur compounds

## 11. TOXICOLOGICAL INFORMATION

### ACUTE

**DERMAL LD<sub>50</sub>:** 3500 mg/kg (Mouse)

**ORAL LD<sub>50</sub>:** 7712 mg/kg (Rat)

**INHALATION LC<sub>50</sub>:** 2.5 mg/l (vapours) Rat 6 hrs.

**EYE EFFECTS:** May cause temporary eye irritation.

**SKIN EFFECTS:** Material is a defatting agent and may result in soreness, inflammation and possible dermatitis.

**CHRONIC:** Prolonged or repeated inhalation exposure may produce signs of central nervous system involvement, particularly dizziness and jerking eye movements. Prolonged or repeated skin contact may cause skin sensitization and an associated dermatitis in some individuals.

### CARCINOGENICITY

**IARC:** Not Listed by IARC

**NTP:** Not Listed by NTP

**OSHA:** Not Listed by OSHA

**REPEATED DOSE EFFECTS:** Ingestion - Harmful if swallowed

**IRRITATION:** Material is a defatting agent and may result in soreness, inflammation and possible dermatitis.

**SENSITIZATION:** May cause an allergic skin reaction.

**REPRODUCTIVE EFFECTS:** Ethylene glycol has been found to cause birth defects in laboratory animals. The significance of this finding to humans has not been determined.

**TARGET ORGANS:** Eyes, Skin, Liver, Kidney, Central Nervous System, Blood and Lung

## 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL DATA:** Do not allow to enter into surface water or drains.

**BIOACCUMULATION/ACCUMULATION:** The product is not expected to be hazardous to the environment. Ecotoxicological data on main components only.

**DISTRIBUTION:** Mobile in soils

**AQUATIC TOXICITY (ACUTE):** Fish

**96-HOUR LC<sub>50</sub>:** 72860 mg/l (96 hours: Pimephales promelas (Fat-head Minnows)

**48-HOUR EC<sub>50</sub>:** > 100 mg/l (48 h; Daphnia magna)

**96-HOUR EC<sub>50</sub>:** > 6500 mg/l Selenastrum capricornutum

**CHEMICAL FATE INFORMATION:** Readily Biodegradable

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Disposal must comply with federal, state, and local disposal or discharge laws.

**FOR LARGE SPILLS:** Dispose of waste at an appropriate waste disposal facility according to current applicable laws and regulations.

**PRODUCT DISPOSAL:** Collect in appropriate containers. Dispose of waste at an appropriate waste disposal facility in accordance with current applicable laws and regulation, and product characteristics at time of disposal.

**EMPTY CONTAINER:** Do not re-use empty container. Empty container should be taken to an approved waste handling site for recycling or disposal.

## 14. TRANSPORT INFORMATION

**DOT (DEPARTMENT OF TRANSPORTATION)**

**PROPER SHIPPING NAME:** Not Regulated (unless package contains a reportable quantity).

**REPORTABLE QUANTITY (RQ) UNDER CERCLA:** 9,090 Lbs.

**COMMENTS:** Not classified as dangerous goods for carriage under US DOT/ADR/RID/AND/IMDG/ICAO/IATA regulations.

## 15. REGULATORY INFORMATION

**UNITED STATES**

**SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)**

**311/312 HAZARD CATEGORIES:** Acute health, chronic health

**313 REPORTABLE INGREDIENTS:** Yes

**TITLE III NOTES:** Section 313 (40 CFR 372)

**CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)**

**CERCLA REGULATORY:** Section 103: Spills of this product over RQ (reportable quantity) must be reported to the National Response Center.

**CERCLA RQ:** The RQ for this product, based on the RQ for Ethylene Glycol (55% maximum) of 5,000 lbs., is 9,090 lbs. Some states may have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

**REPORTABLE SPILL QUANTITY:** 9,090 lbs (base: 55% )

**EPA**

**EPA RQ INGREDIENT:** Ethylene Glycol

**CALIFORNIA PROPOSITION 65:** This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

**16. OTHER INFORMATION**

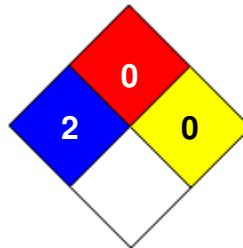
**REASON FOR ISSUE:** GHS SDS Format

**APPROVED BY:** Scott Margulis    **TITLE:** Chief Operating Officer

**PREPARED BY:** Scott Margulis    **Date Prepared:** 06/30/2015

**HMIS RATING**

<b>HEALTH</b>		<b>2</b>
<b>FLAMMABILITY</b>		<b>0</b>
<b>PHYSICAL HAZARD</b>		<b>0</b>
<b>PERSONAL PROTECTION</b>		<b>B</b>

**NFPA CODES**

**MANUFACTURER SUPPLEMENTAL NOTES:** All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The Manufacturer shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken. You can contact the Manufacturer to ensure that this document is the most current available. Alteration of this document is strictly prohibited.

**ADDITIONAL MSDS INFORMATION:** Prepared by: Responder (ESP Consulting, LLC) 877-756-4666

**MANUFACTURER DISCLAIMER:** Information given herein is offered in good faith as accurate, but without guarantee. Conditions of use and suitability of the product for particular uses are beyond our control; all risks of use of the product are therefore assumed by the user. Nothing is intended as a recommendation for uses which infringe valid patents or as extending license under valid patents. Appropriate warnings and safe handling procedures should be provided to handlers and users.