STA CLEAN PRODUCTS
MATERIAL SAFETY DATA SHEET

MSDS# STA 666B VERSION: 004

Product: Sta Clean Heavy Duty Antifreeze 100%

Product No: STA666B

Sta Clean Products

2229 Coy Ave. Bakersfield, CA 93307

EMERGENCY ASSISTANCE

FOR EMERGENCY ASSISTANCE INVOLVING CHEMICALS CALL-

STA CLEAN PRODUCTS (661) 836-8652

I CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Sta Clean PG Heavy Duty Antifreeze 100%

CAS Registry Number: 57-55-6

Chemical Family: Propylene Glycol HMIS HAZARD RATING

DOT Hazardous Material HEALTH 0

Proper Shipping Name: Not Regulated FLAMMABILITY 1
DOT Hazard Class: Not Regulated REACTIVITY 0

DOT Packing Group: Not Regulated DOT Reportable Quantity Not Applicable UN/NA ID No. Not Regulated

Additional Description Requirement NA

II COMPOSITION / INFORMATION ON INGREDIENTS

(This may not be a complete list of components)

(Compositions given are typical values, not specifications)

COMPONANT	CAS NUMBER	% WGT
PROPYLENE GLYCOL	57-55-6	97
PROPRIETARY	NDA	3

Refer to Section 11 Regulatory Information

Carcinogen # NA

Occupation Exposure Limits:

OSHA: Permissible Exposure Limit (PEL) - NA ACGIH: Threshold Limit Value (TLV) - NA cal OSHA: Permissible Exposure Limit (PEL) - NA

NA - NOT APPLICABLE

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PHYSICAL / CHEMICAL CHARACTERISTICS Ш

Boiling Point (760 mm Hg) 369 degree F Vapor Pressure (mm Hg) 0.004 Vapor Density (AIR+1) 2.6 Specific Gravity (H20=1)

At 20/20 C 1.038

Melting Point N/A

Evaporation Rate

(Butyl Aceetate=1) 0.005 Solubility in Water 100%

Appearance and Odor: Yellowish - Green Liquid

Almost Odorless

IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used) (TCC) 214 Degree F. Autoignition Temperature (Method) 700 Degree F. Flammable Limits (% Vol. In Air) **LEL** 2.6 17.4 **UEL**

Heat from fire can generate flammable vapor. When mixed with air and exposed to ignition source, vapors can burn in open or explode if confined. Vapors may travel long distances along the ground before igniting and flashing back to vapor source. Gine sprays/mists may be combustible at temperatures below normal flash point. Aqueous solutions containing less than 95% propylene glycol by weight have no flash point as obtained by standard test methods. However, aqueous solutions of propylene glycol greater than 22% by weight, if heated sufficiently, will produce flammable vapors. Only aqueous solutions of propylene glycol less than 22% should be used in sprinkler systems or other fire-fighting equipment. Always drain and flush systems containing propylene glycol with water before welding or other maintenance.

Extinguishing Media: alcohol type foam are preferred if available. CO2. Dry Chemical.

Use water fog or fine spray for cooling.

Do not use direct woater stream. Will spread fire.

Special Fire Fighting Procedures: Do not enter fire area without proper protection.

> Do not use direct water stream. Fight fire from safe distance Use water fog or fine spray for cooling. Avoid frothing / steam explosion. Burning liquid may float on water. Although water soluble, may not be practical to extinguish fire by water dilution.

REACTIVITY DATA

Stability: Stable under normal storage conditions

Incompatibility: (Materials to Avoid) Oxidizing material.

Hazardous Decomposition or Byproducts: Burning can produce carbon monoxide and/or

carbon dioxide in the presence of limited oxygen.

Hazardous Polymerization: Not expected to occur.

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VI HEALTH HAZARD DATA

Summary of Acute (Short Term) Health Hazards: Not expected to present a significant acute health hazard upon short term exposure.

Route of Exposure:	Signs and Symtoms	Primary Route(s)
Inhalation:	No significant signs or symptoms	NO
Eye Contact:	May cause minor eye irritation	Χ
Skin Absorption:	No significant signs or symptoms	NO
Skin Irritation:	Contact with bare skin may cause minimal irritation.	Χ
Ingestion:	No significant signs or symptoms	NO

Summary of Chronic Hazards: No chronic health effects are expected from normal use.

Medical Conditions Generally Aggravated by Exposure: This materal or its emissions may aggravate pre-existing eye disease.

High concentrations of Propylene Glycol in water when held in contact with human skin under closed conditions have been reported to cause skin irritation (Cosmetics and Toiletries 99:83-91, 1984) The authors attribute the observations to a sweat retention reaction by skin. No reactions were observed in open patch tests with human subjects. One literature report indicated rare eczematous skin reactions and even more rarely an allergic skin reaction from exposure to Propylene Glycol (Anderson and Starr, Hautzard 33 (1) 1982).

VII PRECAUTIONS FOR SPILL AND DISPOSAL

Precautions if Material is Released or Spilled:

Small Spills: Stop release. Soak up with an absorbant, inert material and use suitable disposal

containers. Slippery walking. Restrict water use for cleanup. May biodegrade. Contain / minimize

Large Spills: Evacuate/limit access. Equip responders with proper protection. Prevent flow to sewers / public

water. Stop release. Restrict water use for cleanup. Slippery walking. Impound / recover large land spill and pump into suitable container. On water, material is soluble and may float or sink. May biodegrade. Contain / minimize dispersion / collect. Disperse residue. Report per regulatory

requirements.

Disposal Methods: Disposer must comply with federal, state and local disposal or discharge laws. Landfill

solids at permitted sites. Use registered transporters. Burn concentrated liquids, diluting with clean, low viscosity fuel. Avoid flame outs. Assure emissions comply with applicable regulations. Diluted aqueous waste may biodegrade. Assure effluent complies with

applicable regulation. Check with local authorities.

VIII PRECAUTIONS FOR SAFE HANDLING AND USE

Precautions To Be Taken In Handling and Storing:

Avoid contact with eyes, skin and clothing. Wash thouroughly after handling

Never use welding or cutting torch on or near empty drum.

Other Precautions: Laboratory studies indicate that Proplene Glycol is readily biodegradable in a biological

wastewater treatment plant. All disposal methods must be in compliance with all Federal State / Provincial and Local laws and regulations. Regulations may vary in different locations.

Check with local authority.

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IX PROTECTIVE EQUIPMENT & OTHER CONTROL MEASURES

Respiratory Protection: No special respiratory protection is recommended under anticipated conditions of normal

use with adequate ventilation.

Eye: Goggles and / or face shield must be worn when possibility exists for eye contact due to splashing

or spraying liquid, airborne particles or vapor.

Skin: Not normally considered a skin hazard. Wear long sleeved shirt, trousers, and safety shoes.

practice good personal hygiene. Wash hands and other exposed areas with mild soap and

water before eating, drinking, smoking and when leaving work.

Ventilation: General room ventilation. No special ventilation in recommended under anticipated conditions

of normal use beyond that needed for normal comfort control.

Other Hygienic / Good personal hygiene practices. No special work practices are needed beyond the above

Work Practices: recommendations under anticipated conditions of normal use.

X EMERGENCY AND FIRST AID

Inhalation: Remove to fresh air if effects occur. Consult a physician.

Eye Contact: Immediately rinse with clean water for 20-30 minutes. Seek medical attention if pain, blinking,

tears or redness persist.

Skin Contact: Wash with soap and water.

Ingestion: Drink tow glasses of water. Not expected to present a significant ingestion hazard under anticipated

conditions of normal use.

Physicians Emergency Medical Treatment Procedures:

Treat symptomatically. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient. After adequate fire aid, no further treatment is required

unless symptoms reappear.

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ΧI REGULATORY INFORMATION

OSHA Standard 29CFR 1910,1200 requires that information be provided to employees regarding the hazards of chemicals by means of a hazard communication program including labeling, material safety data sheet, training and access to written records. We request that you, and it is your legal duty to, make all information in this Material Safery Data Sheet available to your employees.

To aid our customer in complying with regulatory requirements SARA TITLE III hazard categories for components of this product are listed in Section II if they present a physical or health hazard and are present at or above 1% in the mixtures If a component is identified as a Carcinogen by NTP, IARC, or OSHA as of the date of the MSDS, it will be listed an footnoted in this section when present at or above 0.1% in the products. Additional health information may be found in Section VI. If the word 'yes' appears next to any category, this product may be reportable by you under the requirements of 40 CFR Part 370. Please consult those regulations for details.

SARA/TITLE 111 SECTION 313 Hazard Catagories Not Listed As Carcinogen - IARC, NTP, OSHA

Toxic substance Control Act (TSCA)

Componants of this product (Proprietaary) are required to be on the Toxic Substances Control Act (TSCA) Chemical Substance Inventory are listed Non-Confidential

California Safe Drinking Water and Toxic Enforcement Act of 1988 - Proposition 65 This material is not known to contain any chemical currently listed as carcinogens or reproductive toxins under California Proposition 65 at levels which would be subject to the proposition.

XII MSDS LEGEND

OSHA = OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

CAS = CHEMICAL ABSTRACTS SERVICE REGISTY # PEL = PERMISSIBLE EXPOSURE LIMIT (15 MINUTES) SHORT TERM EXPOSURE LIMIT (15 MINUTES) STEL =

THRESHOLD LIMIT VALUE (ACGH) TLV = TWA = TIME WEIGHTED AVERAGE (8 HOURS)

CEILING = **CEILING LIMIT (15 MINUTES)** CEL = CORPORATE EXPOSURE LIMIT

NA = **NOT APPLICABLE** NOT ESTAAVLISHED NE = NO DATA AVAILABLE NDA =

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For additional information: Contact MSDS Coordinator Sta Clean Products during business hours. Pacific Time (661) 836-8652

END OF MSDS