

Material Safety Data Sheet

GCB-LIQUID

Complies with OSHA's Hazard Communication Standard 29 CFR 1910.1200.

GOODSON

Tools and Supplies for Engine Builders
156 Galewski Drive • P.O. Box 847 • Winona, MN 55987-0847
Toll-Free 1-800-533-8010 • Local 507-452-1830 • www.goodson.com

Date of Preparation: October 10, 1996

1. IDENTIFICATION

Part No.: GCB-LIQUID
Description: CC Measuring Liquid Concentrate
Chemical Family: Polyether Polyol Mixture

2. COMPOSITION / INFORMATION ON INGREDIENTS

FOR EXPOSURE LIMITS SEE SECTION 8.

FOR OTHER TOXICOLOGICAL INFORMATION SEE SECTION 11.

| <u>Descriptive Name</u> | <u>CAS Number</u> | <u>Percentage Range</u> | <u>Hazardous PER 29CFR 1910.1200</u> | <u>Exposure Standards</u> |
|---------------------------|-------------------|-------------------------|--------------------------------------|---------------------------|
| Amino-2 Meth-2 Propanol-1 | 124-68-5 | 1-5% | Yes | None Established |
| Triethanolamine | 102-71-6 | 10-20% | Yes | None Established |

3. HAZARDS IDENTIFICATION

Do not take internally. Avoid contact with skin, eyes and clothing. Upon contact with skin or eyes, wash off with water.

4. FIRST AID MEASURES

Eye Contact: Immediately flush with large amounts of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Call a physician at once.

Skin: Immediately flush with water for at least 15 minutes. Wash the contaminated skin with soap and water. If irritation develops, call a physician. If clothing comes in contact with the product, the clothing should be laundered before re-use.

Ingestion: Immediately drink water to dilute. Consult a physician if symptoms develop.

Inhalation: This product is not toxic by inhalation. Remove individual to fresh air.

5. FIRE FIGHTING MEASURES

FLAMMABILITY DATA

Flammable: no

Combustible: no

Pyrophoric: no

Flash Point: none

Test Method: Cleveland Open Cup

Autoignition Temperature: no data

Flammable Limits at Normal Temperature & Pressure(% volume in air): LEL-no data UEL-no data

NFPA Ratings: not established

HMIS Ratings: Health: 1 Flammability: 0 Reactivity: 0

Extinguishing Media: Alcohol foam, carbon dioxide, dry chemical, water spray

Firefighting Techniques and Comments: This product would not be expected to burn unless all the water is boiled away. The remaining organic compounds may be ignitable. Use water to cool containers exposed to fire. See Section 6 for protective.

6. ACCIDENTAL SPILL / RELEASE INFORMATION

FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC AT 1-800-424-9300.

Reportable Quantity: not applicable

Spill Mitigation Procedures: Evacuation procedures must be placed into effect. Utilize emergency response personal protective equipment prior to the start of any response. Stop source of spill as soon as possible and notify appropriate personnel.

Air Release: Vapors may be suppressed by the use of water fog or spray. Contain all liquid for treatment and/or disposal as a (potential) hazardous waste.

Water Release: This material is heavier than and soluble in water. Notify all downstream water users of possible contamination. Divert water flow around spill if possible and safe to do so. If unable to divert, create an overflow dam to contain material. Continue to handle as described in land spill.

Land Spill: Create a trench to contain materials. Spill materials may be absorbed using sand, clay, earth or commercial absorbent. Do not place materials back in original container. Decontaminate all clothing and the spill area using soap solution and flush with large amounts of water.

ACCIDENTAL SPILL / RELEASE INFORMATION CONT...

Spill Residues: Dispose of per guidelines under Section 13, Disposal Considerations.

Personnel Protection for Emergency Spill and Fire Fighting Situations: Additional respiratory protection is necessary when a spill or fire involving this product occurs. You are recommended to use a self-contained breathing apparatus (SCBA) positive pressure unit. Additional protective clothing must be worn to prevent personal contact with this material. Those items include but are not limited to boots, gloves, hard hat, splash-proof goggles and impervious clothing, i.e., chemically impermeable suit. Compatible materials for response to this material are neoprene, chlorinated polyethylene, polyvinyl chloride, butyl rubber, viton, polyvinyl alcohol and saranex.

7. HANDLING AND STORAGE

DO NOT TAKE INTERNALLY. AVOID CONTACT WITH SKIN, EYES AND CLOTHING UPON CONTACT WITH SKIN OR EYES, WASH OFF WITH WATER.

Storage Conditions: Do not store at temperatures above 49°C (120°F)

PRODUCT STABILITY AND COMPATIBILITY

Shelf Life Limitations: 1 year in drums, 2 years in bulk

Incompatible Materials for Storage or Transport: Strong oxidizers

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

PERSONAL PROTECTION FOR ROUTINE USE OF THIS PRODUCT

Respiratory Protection: none required

Ventilation: Local exhaust ventilation is recommended if vapors, mists or aerosols are generated. Otherwise use general exhaust ventilation.

Skin and Eye Protective Equipment: Use chemical goggles and impermeable gloves

EQUIPMENT SPECIFICATIONS (WHEN APPLICABLE)

Respirator Type: none required

Protective Clothing Type (This includes: gloves, boots, apron, protective suit): Impervious

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear liquid

Freezing Point: Approx. 32°F (0°C)

Boiling Point: Approx. 212°F (100°C)

Decomposition Temperature: Stable to boiling point

Specific Gravity: 1.033 @ 60°F

Bulk Density: 8.62 lbs/gal @ 60°F

pH @ 25°C: 9.6

Vapor Pressure @ 25°C: no data

Solubility in Water: complete

Volatiles, Percent by Volume: 50-80%

Evaporation Rate: no data

Vapor Density: no data

Molecular Weight: not applicable / mixture

Odor: Mild, slightly ammoniacal

Coefficient of Oil/Water Distribution: no data

10. STABILITY AND REACTIVITY

CONDITIONS UNDER WHICH THIS PRODUCT MAY BE UNSTABLE

Temperatures Above: Product is stable to the boiling point.

Mechanical Shock or Impact: No

Electrical (Static) Discharge: No

Hazardous Polymerization: Will NOT occur

Incompatible Materials: Strong oxidizers, nitrites

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, oxides of nitrogen

11. TOXICOLOGICAL INFORMATION

Routes of Absorbtion: Dermal, eye contact, ingestion

WARNING STATEMENTS AND WARNING PROPERTIES

Do not take internally. May cause eye and mucous membrane irritation. May cause skin irritation.

Do not formulate this product with nitrites. The addition of nitrites to formulations containing the aliphatic amine lead to the formation of nitrosamines which have been shown to cause cancer in laboratory animals.

HUMAN THRESHOLD RESPONSE DATA

Odor Threshold: No data available

Irritation Threshold: No data available

Immediately Dangerous to Health or Life: The IDLH concentration has not been established for this product.

SIGNS, SYMPTOMS, AND EFFECTS OF EXPOSURE

Inhalation: Acute: No significant adverse effects to health are expected to occur from inhalation. Chronic: There are no known or reported effects from chronic exposure.

TOXICOLOGICAL INFORMATION CONT...

Skin: Acute: Contact with the skin may cause irritation consisting of transient redness. The irritant effect would not result in permanent damage. Chronic: There are no known or reported effects from chronic exposure except for effects similar to those experienced from a single exposure.

Eye: Contact with the eyes would be expected to cause irritation consisting of reversible redness, swelling and mucous discharge to the conjunctiva. No corneal involvement or visual impairment would be expected.

Ingestion: Acute: Ingestion of this product may cause gastrointestinal discomfort consisting of nausea, vomiting, lethargy or diarrhea. Chronic: There are no known or reported effects from chronic exposure except for effects similar to those experienced from a single exposure.

Medical Conditions Aggravated by Exposure: None known or reported

Interactions with other chemicals which enhance toxicity: None known or reported

ANIMAL TOXICOLOGY

Acute Toxicity: Inhalation LC50; Believed to be >200 mg/L for 1 hour (rat)

Dermal LD50; Believed to be >2 g/kg (rabbit)

Oral LD50; Believed to be >5 g/kg (rat)

Irritation: Eye, skin and mucous membrane irritant

Acute Target Organ Toxicity: Irritation to eyes, skin and mucous membranes.

Chronic Target Organ Toxicity: Chronic (repeated) exposure to this product would be expected to produce effects similar to those experienced from a single exposure. Long term oral and dermal studies with ethanolamines in animals have been shown to produce liver and kidney damage. It is judged that the low concentration of ethanolamine in this product would preclude the risk of development of these symptoms.

Reproductive and Developmental Toxicity: There are no known or reported effects on reproductive function or fetal development for this specific mixture.

Carcinogenicity: This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, or EPA.

Mutagenicity: This product is not known to be mutagenic.

12. ECOLOGICAL INFORMATION

None known or reported.

13. DISPOSAL CONSIDERATIONS

If this product becomes a waste, it DOES NOT meet the criteria of a hazardous waste as defined under 40 CFR 261, in that it does not exhibit the characteristics of a hazardous waste under subpart D. As a nonhazardous liquid waste, it should be disposed of in accordance with local, state and federal regulations by incineration.

Care must be taken to prevent environmental contamination from the use of this material. The user of this material has the responsibility to dispose of unused material, residues and containers with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

14. TRANSPORT INFORMATION

This material is not regulated as a DOT Hazardous Material.

15. REGULATORY INFORMATION

Toxic Substances Control Act (TSCA): The components of this product are listed on the TSCA Inventory.

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT TITLE III (SARA):

Hazard Categories, PER 40 CFR 370.2: Health - Immediate (Acute) Physical - None

EMERGENCY PLANNING AND COMMUNITY RIGHT TO KNOW, PER 40 CFR 355, APPA:

Extremely Hazardous Substance-Threshold Planning Quantity: None established

Supplier Notification Requirements, PER 40 CFR 372.45: None established

INTERNATIONAL REGULATORY INFORMATION

Canada: All components are listed on the DSL.

EEC: All components are listed on EINECS.

Japan: All components are listed on MITI.

16. OTHER INFORMATION

Supersedes: 12/1/89

Revision Information: Update to meet ANSI standard format.

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Date of Preparation: December 1, 1989

1. IDENTIFICATION

Part No. and Description: GCB-LIQUID CC Measuring Liquid Concentrate

2. HAZARDOUS INGREDIENTS

| <u>Ingredients</u> | <u>CAS #</u> |
|----------------------------|--------------|
| 2-Amino-2methyl-1-propanol | 124-68-5 |
| Triethanolamine | 102716 |

3. PHYSICAL/CHEMICAL CHARACTERISTICS

| | | | |
|-------------------------------|-----------------------|--|---------------------------------|
| Boiling Point: | contains water; 212°F | Specific Gravity(H₂O=1): | 1.025 |
| Vapor Pressure(mm Hg): | not applicable | Melting Point: | liquid, freezes at approx. 30°F |
| Vapor Density(Air=1): | not applicable | Evaporation Rate(BuAc=1): | not applicable |
| Solubility in Water: | complete | Appearance & Odor: | clear amber liquid, mild odor |

4. FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): none (C.O.C.)
Flammable limits: not applicable
Extinguishing Media: not applicable
Special Firefighting Procedures: not applicable
Unusual Fire & Explosion Hazards: not applicable

5. REACTIVITY DATA

Stability: Stable
Incompatibility(Materials to Avoid): Do not use on magnesium. Do not mix with nitrite.
Hazardous Decomposition or Byproducts: Thermal decomposition produces oxides of carbon & nitrogen.
Hazardous Polymerization: Will not occur

6. HEALTH HAZARD DATA

Routes of Entry: INHALATION: Yes SKIN: Yes INGESTION: No
Health Hazards(Acute & Chronic): Mildly alkaline product. Eye contact causes acute irritating effects. Inhalation of large quantities of mist causes irritation to nasal passages and throat. Prolonged and repeated skin contact may cause redness and irritation in some people.
Carcinogenicity: NTP: No IARC Monographs: No OSHA Regulated: No
Signs & Symptoms of Exposure: See Health Hazard Section 6
Medical conditions generally aggravated by exposure: Allergies to mildly alkaline soaps & solutions.
Emergency & First Aid Procedures: EYE CONTACT: Flush with water until irritation stops.
SKIN: Flush with water until irritation stops
INHALATION(from mist): Remove to fresh air. If irritations persist, seek medical attention.

7. PRECAUTIONS FOR SAFE HANDLING AND USE

Precautions to be taken in case material is released or spilled: Dike & recover spillage. Flush small residue with large amounts of water.
Waste Disposal Method: Dispose of accordingly to government regulations. Not classified as hazardous waste under 40CFR261.
Precautions to be taken in Handling & Storing: Keep partially used drums sealed. Rotate stock.
Other Precautions: If product freezes, thaw & mix drum before use.

8. CONTROL MEASURES

Respiratory Protection: If large amounts of mist, use approved facial protection. Respirator not usually required.
Ventilation: Local exhaust required if misting is heavy.
Protective Gloves: Impervious
Eye Protection: Safety Goggles, glasses or face shield
Protective Clothing or Equipment: Protective apron
Work/Hygienic Practices: Wash clothing after contamination.