SAFETY DATA SHEET

Arctic Ban -50 Antifreeze

Section 1- Chemical Product and Company Identification

Product Name: Arctic Ban -50 Antifreeze
Supplier: Camco Manufacturing, Inc.
121 Landmark Drive
Greensboro, NC 27409
1-800-334-2004
Product Use: Antifreeze
Product Code: 30806 (Gallon), 30807 (Gallon) and 30808 (55 Gallon Drum)
Date of Preparation/Revision: March 17, 2015
In case of Emergency: 1-800-535-5053

Section 2- Hazards identification

Physical State: Liquid. [CLEAR, RED, FLAMMABLE LIQUID WITH CHARACTERISTIC ODOR]

WARNING!

GHS Classifications
Flammable Liquid (Category 3)
Specific Target Organ Systemic Toxicity (STOT)-Repeated Exposure (Category 2)
Skin irritation (Category 3)
Eye irritation (Category 2B)

Hazard Statements
H226 Flammable liquid and vapor
H373 May cause damage to organs through prolonged or repeated exposure
H316 Causes mild skin irritation.
H320 Causes eye irritation.

Precautionary statements
P102 Keep out of reach of children
P210 Keep away from heat/sparks/open flames/hot surfaces – No smoking
P260 Do not breathe dust/fume/gas/mist/vapours/spray
P264 Wash thoroughly after handling

Response statements
P314 Get Medical advice/attention if you feel unwell
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+313 If eye irritation persists get medical advice/attention
P332+313 If skin irritation occurs: Get medical advice/attention
SAFETY DATA SHEET

Arctic Ban -50 Antifreeze

P321 Specific treatment (see First Aid Measures on Safety Data Sheet)

Disposal
P501 Dispose of contents/container in accordance with local/regional/national regulations

FLAMMABLE LIQUID AND VAPOR. MAY CAUSE DAMAGE TO ORGANS.

WARNING! Flammable liquid. Keep away from heat, sparks and flame. Avoid breathing vapor or mist. Avoid contact with skin and clothing. May cause target organ damage, based on animal data. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. This product may be harmful or fatal if swallowed in large quantities. This product is irritating to the eyes and skin. This product is an aqueous solution which will not burn. Irritating and toxic fumes and gases may be released upon thermal processing or during combustion.

Potential Health Effects: Eyes
Contact with the eyes can cause moderate irritation. Symptoms may include discomfort or pain and redness. Severe over exposure can result in swelling of the conjunctiva along with tissue damage which may lead to blindness.

Potential Health Effects: Skin
This product is irritating to the skin. Depending on the duration of contact, symptoms will include reddening, discomfort, irritation, and possible tissue damage. Repeated contact with this material may produce dermatitis.

Potential Health Effects: Ingestion
This product may be harmful or fatal if swallowed. If ingested, this product will immediately cause burns to the mouth, throat, esophagus and possibly the digestive tract. Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea. This product may cause methemoglobinemia upon ingestion characterized by cyanosis, headache, dizziness, fatigue, nausea, vomiting, drowsiness, stupor, coma and rarely death.

Potential Health Effects: Inhalation
This product is irritating to the respiratory system. Inhalation of vapors or mists of the product can cause sneezing, coughing and difficulty breathing.

Medical Conditions Aggravated by Exposure
Pre-existing skin and eye conditions.

HMIS Ratings: Health: 1 Fire: 2 Reactivity: 0
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

See toxicological information (section 11)

Section 3 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS Number</th>
<th>% Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Alcohol</td>
<td>64-17-5</td>
<td>15 – 25%</td>
</tr>
</tbody>
</table>

Component Information/Information on Non-Hazardous Components

All other components are considered to be non-hazardous under 29 CFR 1910.1200
SAFETY DATA SHEET

Arctic Ban -50 Antifreeze

Section 4 - First Aid Measures

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

**Eye contact**
Immediately flush eyes with water for at least 15 minutes, while holding eyelids open. Seek medical attention at once.

**Skin contact**
For skin contact, wash immediately with soap and water. If irritation persists get medical attention.

**Ingestion**
If material is ingested, immediately contact a physician or poison control center. Do not induce vomiting. Dilute by giving water. Keep warm and quiet. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to a victim who is unconscious or is having convulsions.

**Inhalation**
If inhaled, immediately remove the affected person to fresh air. If the affected person is not breathing, apply artificial respiration. If irritation persists get medical attention.

**Notes to Physician**
Provide general supportive measures and treat symptomatically.

Section 5 - Fire-Fighting Measures

**FLASH POINT:** 110° F (43° C)  
**METHOD USED:** TCC  
**FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: 3.3% UPPER: 21.0%**

**General Fire Hazards**
This product is an aqueous solution which will not burn.

**Hazardous Combustion Products**
Decomposition may yield carbon dioxide compounds and oxides of nitrogen.

**Extinguishing Media**
Dry chemical, foam, carbon dioxide, water fog.

**Fire Fighting Equipment/Instruction**
Firefighters should wear full protective clothing including self contained breathing apparatus.

**NFPA Ratings:**  
Health: 1  
Fire: 2  
Reactivity: 0  
Other: none

**Hazard Scale:** 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Section 6 - Accidental release measures

**Containment Procedures**
Stop the flow of material, if this is without risk. Wear appropriate protective equipment and clothing during clean-up. Contain the discharged material and dike the spilled material where possible. Prevent entry into sewers, drains, underground or confined spaces, water intakes and waterways.

**Clean-Up Procedures**
Absorb spill with inert material such as: lime, polypads, or other suitable absorbent material. Shovel the absorbed material into appropriate container for disposal.

**Evacuation Procedures**
Isolate area. Keep unnecessary personnel away.

**Special Procedures**
Isolate exposure. Wear appropriate personal protective equipment. Follow all Local, State, Federal and Provincial regulations for disposal.
Section 7- Handling and Storage

Handling Procedures
Open container carefully, as needed to relieve any build up of pressure. Do not get this material in your eyes, on your skin, or on your clothing. Do not inhale vapors or mists of this product. Use this product with adequate ventilation. Wash thoroughly after handling.

Storage Procedures
Store in a cool, dry area. Store away from direct sunlight and any sources of heat. Empty product containers may contain product residue. Do not reuse empty containers. Do not store this material in open or unlabeled containers.

Section 8 - Exposure Controls / Personal Protection

Exposure Guidelines
A: General Product Information
Keep formation of airborne mists to a minimum.
B: Component Exposure Limits
ACGIH, OSHA, and NIOSH have not developed exposure limits for any of this product's components.

Engineering Controls
Provide local and general exhaust ventilation to effectively remove and prevent buildup of any vapors or mists generated from the handling of this product.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face
Wear chemical goggles and face shield.

Personal Protective Equipment: Skin
Wear impervious (neoprene) gloves, impervious apron.

Personal Protective Equipment: Respiratory
If ventilation is not sufficient to effectively prevent buildup of vapors or mists, appropriate approved NIOSH respiratory protection must be provided. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2-1992). A written respiratory protection program, including provisions for medical certification, training, fit testing, exposure assessments, maintenance, inspection, cleaning, and convenient, sanitary storage must be implemented.

Personal Protective Equipment: General
Eye wash fountain and emergency showers are recommended. An emergency spill response will necessitate the use of more stringent personal protective equipment.

Section 9 - Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Red Transparent Liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Mild Odor</td>
</tr>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>pH: (@59° F / 15° C)</td>
<td>6.0 to 8.0</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>&gt;212°F (&gt;100° C)</td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET

Arctic Ban -50 Antifreeze

Melting Point: Not Determined
Solubility: Completely
Specific Gravity: (@70° F / 21° C) 1.000
Freeze Point: -20° F (-28.9° C)
Burst Protection: -50° F (-45.5° C)
Flash Point (PMCC): 110° F (43° C)
Auto-ignition Temperature: 689° F (365 °C)
Flammable Limits in Air by Volume: LOWER: ~ 3.0 vol % UPPER: ~ 21.0 vol %
Evaporation Rate: Similar to Water
Decomposition Temperature: Not Determined
Viscosity (cps): < 50cps
Physical Properties: Additional Information
No additional information available

Section 10 - Stability and Reactivity

Chemical Stability
This is a stable material.

Chemical Stability: Conditions to Avoid
Avoid contact with extreme heat and incompatible materials.

Incompatibility
This product is incompatible with strong acids, bases and oxidizing agents.

Hazardous Decomposition
Decomposition may yield carbon dioxide, carbon monoxide and oxides of nitrogen.

Hazardous Polymerization
Will not occur.

Section 11 - Toxicological Information

Acute and Chronic Toxicity
General Product Information
Any toxicological information included in this section is based upon data associated with the components or an analogous product.

Ethyl Alcohol (64-17-5)

Acute Inhalation LC50 Mouse: 0.039 mg/l 4 Hours
Acute Inhalation LC50 Rat: 20000 mg/l 10 Hours
Acute Oral LD50 Dog: 5.5 g/kg
Acute Oral LD50 Guinea pig: 5.6 g/kg
Acute Oral LD50 Mouse: 3450 mg/kg
Acute Oral LD50 Rat: 7060 mg/kg
Acute Oral LD50 Rat: 6.2 g/kg
Acute Other LD50 Mouse: 933 mg/kg
Acute Other LD50 Rat: 1440 mg/kg

Carcinogenicity
ACGIH Carcinogens
Ethyl Alcohol (CAS 64-17-5) A3 Confirmed animal carcinogen with unknown relevance to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity
Ethyl Alcohol (CAS 64-17-5) 1 Carcinogenic to humans.

Chronic Toxicity
Accute oral toxicity:
Hazardous by OSHA criteria. Prolonged inhalation may be harmful. Repeated absorption may cause disorder of central nervous system, liver, kidneys and blood. Prolonged exposure may cause chronic effects.
SAFETY DATA SHEET

Arctic Ban -50 Antifreeze

Epidemiology
No epidemiological data is available for this product. Classified as slightly irritating.

Neurotoxicity
No data available for this product.

Mutagenicity
This product is not mutagenic.

Teratogenicity
No data available for this product.

Other Toxicological Information
No additional information available.

Section 12 - Ecological Information

Ecotoxicity
A: General Product Information
In high concentrations, this product may be harmful to both terrestrial and aquatic plant or animal life.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity
EC50 Daphnia: 6870.2524 mg/l 48 hours estimated
LC50 Fish: 10205.6846 mg/l 96 hours estimated

Environmental Fate
Readily and rapidly degradable.

Section 13 - Disposal Considerations

US EPA Waste Number & Descriptions
A: General Product Information
You must test your waste using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes.

B: Component Waste Numbers
No EPA Waste Numbers are applicable for this product's components.

Disposal Instructions
Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

Section 14 - Transport information

US DOT Information
This material is not hazardous as defined by 49CFR 172.101 by the US Department of Transportation.

IMDG
Refer to Current IMDG regulations for full shipping description requirements

IATA
This material is not prepared or packaged for air transportation

International shipping requirements must be determined by the party offering the material for transportation
Section 15 - Regulatory Information

U.S. Federal regulations

General Product Information
Product is biodegradable. No additional information available.

United States inventory (TSCA 8b): This material is listed or exempted.
SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: No products were found.
Clean Water Act (CWA) 307: No products were found.
Clean Water Act (CWA) 311: No products were found.
Clean Air Act (CAA) 112 accidental release prevention: No products were found.
Clean Air Act (CAA) 112 regulated flammable substances: No products were found.
Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

State regulations

Connecticut Carcinogen Reporting: This material is not listed.
Connecticut Hazardous Material Survey: This material is not listed.
Florida substances: This material is not listed.
Illinois Chemical Safety Act: This material is not listed.
Illinois Toxic Substances Disclosure to Employee Act: This material is not listed.
Louisiana Reporting: This material is not listed.
Louisiana Spill: This material is not listed.
Massachusetts Spill: This material is not listed.
Massachusetts Substances: This material is listed.
Michigan Critical Material: This material is not listed.
Minnesota Hazardous Substances: This material is not listed.
New Jersey Hazardous Substances: This material is listed.
New Jersey Spill: This material is not listed.
New Jersey Toxic Catastrophe Prevention Act: This material is not listed.
New York Acutely Hazardous Substances: This material is not listed.
New York Toxic Chemical Release Reporting: This material is not listed.
Pennsylvania RTK Hazardous Substances: Ethyl Alcohol (CAS 64-17-5)
Rhode Island Hazardous Substances: This material is not listed.
California Prop 65 Warning: This material is not listed.

Additional Regulatory Information

A: General Product Information
All components are on the U.S. EPA TSCA Inventory List.

Section 16 - Other information

NFPA CODES: Health 1
Flammability 2
Reactivity 0

Note - NFPA ratings are based on a 0-4 rating scale with 0 representing minimal hazards or risks and 4 representing extreme hazards or risks.

Date of Preparation/Revision: March 17, 2015 (Supersedes all previous MSDS and SDS)
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