

**Prod.Name:** Custom Brand Antifreeze/Coolant  
**Manufacturer:** Honeywell Consumer Products Group  
**HMCS ID:** 1193739  
**SUC:** 04 - Metal Working Fluids and Lubricants

# MATERIAL SAFETY DATA SHEET

**Revision:** 17.May.2011  
**Effective:** 17.May.2011  
**Print Date:** 16.Aug.2011  
**Page:** 1 of 8

## 1 PRODUCT AND COMPANY IDENTIFICATION

### PRODUCT INFORMATION

**Product Name:** Custom Brand Antifreeze/Coolant

**Product Code:** MSDS503

**Recommended Use:**

Automobile antifreeze - consumer product.

**External Keys:**

88862638 SPO Catalog Discontinued  
Antifreeze/Coolant Primary Tradename - Distributable Material  
See HMCS No. SPO Catalog Discontinued  
30002453  
19284984 Distributable Material (Part #)  
10-5032 Distributable Material (Part #)  
12378560 Distributable Material (Part #)  
10-5034 Distributable Material (Part #)  
12378561 Distributable Material (Part #)

### MANUFACTURER INFORMATION

**Manufacturer:** Honeywell Consumer Products Group

**Address:**

39 Old Ridgebury Road USA Connecticut 06810-5109 Danbury Mailing

**Communication Lines:**

Phone 800-862-7737 Information in the U.S.  
Phone 800-668-9349 Information in Canada  
Phone 800-424-9300 Emergency (CHEMTREC in the U.S.)  
Phone 613-996-6666 Emergency (CANUTEC in Canada)  
Phone 800-890-2075 Medical Emergencies and all other information (in the U.S)

## 2 INGREDIENT INFORMATION

### FORMULATION

**Ingredients:**

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Prefix</u>	<u>Value</u>	<u>Unit</u>	<u>Exposure Limits</u>
ETHYLENE GLYCOL	107-21-1	Range	80 - 95	% Wt	Yes
DIETHYLENE GLYCOL	111-46-6	Range	0 - 5	% Wt	Yes
WATER	7732-18-5	Range	1 - 5	% Wt	No
HEXANOIC ACID, 2-ETHYL-, SODIUM SALT	19766-89-3	Range	1 - 5	% Wt	No
Neodecanoic acid, sodium salt	31548-27-3	Range	1 - 5	% Wt	No

## 3 HAZARDS IDENTIFICATION

**Hazards Overview:**

**EMERGENCY OVERVIEW:**

Eye and upper respiratory irritant. May cause nausea, vomiting, headache, drowsiness, blurred vision, convulsions, coma or death if ingested or inhaled. Prolonged or repeated skin contact may cause dermatitis or skin sensitization.

**Specific Hazards (Routes Of Exposure):**

<u>Exposure Routes</u>	<u>Exposure Duration</u>	<u>Observation</u>
Inhalation	Acute	May use irritation of the nose and throat with headache, particularly from mists. High vapor concentrations caused, for example, by heating the material in an enclosed and poorly ventilated workplace, may produce nausea, vomiting, headache, dizziness and irregular eye movements.

**Prod.Name:** Custom Brand Antifreeze/Coolant  
**Manufacturer:** Honeywell Consumer Products Group  
**HMCS ID:** 1193739  
**SUC:** 04 - Metal Working Fluids and Lubricants

## MATERIAL SAFETY DATA SHEET

**Revision:** 17.May.2011  
**Effective:** 17.May.2011  
**Print Date:** 16.Aug.2011  
**Page:** 2 of 8

### 3 HAZARDS IDENTIFICATION

**Specific Hazards (Routes Of Exposure):**

<u>Exposure Routes</u>	<u>Exposure Duration</u>	<u>Observation</u>
Skin Contact	Acute	No evidence of adverse effects from available information.
Eye Contact	Acute	Liquid, vapors or mist may cause discomfort in the eye with persistent conjunctivitis, seen as slight excess redness or conjunctiva. Serious corneal injury is not anticipated.
Ingestion	Acute	May cause abdominal discomfort or pain, nausea, vomiting, dizziness, drowsiness, malaise, blurring of vision, irritability, back pain, decrease in urine output, kidney failure, and central nervous system effects, including irregular eye movements, convulsions and coma. Cardiac failure and pulmonary edema may develop. Severe kidney damage which may be fatal may follow the swallowing of ethylene glycol. A few reports have been published describing the development of weakness of the facial muscles, diminishing hearing, and difficulty with swallowing, during the late stages of severe poisoning.
Inhalation	Chronic	Prolonged or repeated inhalation exposure may produce signs of central nervous system involvement, particularly dizziness and jerking eye movements.
Skin Contact	Chronic	Prolonged or repeated skin contact may cause skin sensitization and an associated dermatitis in some individuals.

**Medical Conditions Aggravated By Exposure:**

The available toxicological information and a knowledge of the physical and chemical properties of the material suggest that overexposure is unlikely to aggravate existing medical conditions.

### 4 FIRST AID MEASURES

**First Aid By::**

Inhalation	Remove the victim to fresh air. If breathing has stopped administer artificial respiration. If breathing is difficult, have medical personnel administer oxygen. Get medical attention.
Skin Contact	Remove contaminated clothing. Immediately wash contacted area thoroughly with soap and water. If irritation persists, get medical attention.
Eye Contact	Immediately flush eyes with large amounts of water for 15 minutes. Get medical attention if irritation persists.
Ingestion	Seek immediate medical attention. Immediately call local poison control center or go to an emergency department. Never give anything by mouth to or induce vomiting in an unconscious or drowsy person.

**Notes To Physician:**

The principal toxic effects of ethylene glycol, when swallowed, are kidney damage and metabolic acidosis. The combination of metabolic acidosis, an osmol gap and oxalate crystals in the urine is evidence of ethylene glycol poisoning.

Pulmonary edema with hypoxemia has been described in a number of patients following poisoning with ethylene glycol. Respiratory support with mechanical ventilation may be required.

There may be cranial nerve involvement in the late stages of toxicity from swallowed ethylene glycol. In particular, effects have been reported involving the seventh, eighth, and ninth cranial nerves, presenting with bilateral facial paralysis, diminished hearing and dysphagia.

Ethanol is antidotal and its early administration may block the formation of nephrotoxic metabolites of ethylene glycol in the liver. The objective is to rapidly achieve and maintain a blood ethanol level of approximately 100 mg/dl by giving a loading dose of ethanol followed by a maintenance dose. Intravenous administration of ethanol is the preferred route. Ethanol blood levels should be checked frequently. Hemodialysis may be required.

**Prod.Name:** Custom Brand Antifreeze/Coolant  
**Manufacturer:** Honeywell Consumer Products Group  
**HMCS ID:** 1193739  
**SUC:** 04 - Metal Working Fluids and Lubricants

## MATERIAL SAFETY DATA SHEET

**Revision:** 17.May.2011  
**Effective:** 17.May.2011  
**Print Date:** 16.Aug.2011  
**Page:** 3 of 8

### 4 FIRST AID MEASURES

#### Notes To Physician:

4-Methyl pyrazole (Fomepizole®), a potent inhibitor of alcohol dehydrogenase, has been used therapeutically to decrease the metabolic consequences of ethylene glycol poisoning. Fomepizole is easier to use clinically than ethanol, does not cause CNS depression or hypoglycemia and requires less monitoring than ethanol. Additional therapeutic modalities which may decrease the adverse consequences of ethylene glycol metabolism are the administration of both thiamine and pyridoxine. As there are complicated and serious overdoses, we recommend you consult with the toxicologists at your poison control center.

### 5 FIRE FIGHTING MEASURES

#### Flash Point:

>	254	°F	TOC	123 C.
>	230	°F	SETA	> 110 C.

#### Explosive Limits:

Upper Explosive Limit (UEL)	Not Determined	FLAMMABILITIC LIMIT
Lower Explosive Limit (LEL)	Not Determined	FLAMMABILITIC LIMIT

#### Autoignition Temperature:

Not Determined

#### Extinguishing Media:

For large fires, use alcohol type or all-purpose foams. For small fires, use water spray, carbon dioxide or dry chemical.

#### Fire and Explosion Hazards:

A solid stream of water or foam directed into hot, burning liquid can cause frothing.  
HAZARDOUS COMBUSTION PRODUCTS: Burning may produce carbon monoxide and carbon dioxide.

#### Special Fire Fighting Procedures:

Do not spray pool fires directly.

#### Comment:

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

### 6 ACCIDENTAL RELEASE MEASURES

#### PRECAUTIONS IN CASE OF ACCIDENTAL RELEASE

##### Personal Precautions:

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

#### SPILL OR LEAK PROCEDURES

##### Recovery:

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

### 7 HANDLING AND STORAGE

#### HANDLING

##### Safe Handling Procedures:

DANGER: Harmful or Fatal if Swallowed  
Do not drink antifreeze or solution.  
Avoid eye and prolonged or repeated skin contact.  
Avoid breathing vapors or mists.  
Wash exposed skin thoroughly with soap and water after use.  
Do not reuse empty containers unless properly cleaned.  
Empty containers retain product residue and may be dangerous. Do not cut, weld, drill, etc. containers, even empty.  
Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or

**Prod.Name:** Custom Brand Antifreeze/Coolant  
**Manufacturer:** Honeywell Consumer Products Group  
**HMCS ID:** 1193739  
**SUC:** 04 - Metal Working Fluids and Lubricants

## MATERIAL SAFETY DATA SHEET

**Revision:** 17.May.2011  
**Effective:** 17.May.2011  
**Print Date:** 16.Aug.2011  
**Page:** 4 of 8

### 7 HANDLING AND STORAGE

#### HANDLING

##### Safe Handling Procedures:

sudden ingress of air into vacuum equipment, may result in ignitions without any obvious ignition sources. Published "autoignition" or "ignition" temperatures cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Use of this product in elevated temperature applications should be thoroughly evaluated to assure safe operating conditions.

#### STORAGE

##### Storage Conditions:

Do not store in opened or unlabeled containers.  
Keep container away from open flames and excessive heat.

### 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

##### Engineering Measures:

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

#### EXPOSURE LIMITS

##### Limit Values:

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Type</u>	<u>Value</u>	<u>Specification</u>	<u>Source</u>
ETHYLENE GLYCOL	107-21-1	PEL-Ceiling	50.00ppm	-	OSHA - Permissible Exposure Limits (PELs)
ETHYLENE GLYCOL	107-21-1	GM OEG -Ceiling	50ppm	-	GM Occupational Exposure Guidelines (OEG)
ETHYLENE GLYCOL	107-21-1	TLV-Ceiling	38.50ppm	-	Threshold Limit Values (TLVs) - ACGIH
ETHYLENE GLYCOL	107-21-1	State-Ceiling	50ppm	-	MICHIGAN
ETHYLENE GLYCOL	107-21-1	State-Ceiling	50ppm	-	NEW YORK
ETHYLENE GLYCOL	107-21-1	State-Ceiling	50ppm	-	TENNESSEE
DIETHYLENE GLYCOL	111-46-6	GM OEG -TWA	155mg/m3	-	GM Occupational Exposure Guidelines (OEG)

#### PERSONAL PROTECTIVE EQUIPMENT

##### Personal Protective Equipment (PPE):

Respiratory Protection	For operations where the TLV is exceeded a NIOSH approved respirator with organic vapor cartridges and dust/mist prefilters or supplied air respirator is recommended. Equipment selection depends on contaminant type and concentration. Select and use in accordance with 29 CFR 1910.134 and good industrial hygiene practice. For firefighting, use self contained breathing apparatus.
Hand Protection	Chemical resistant gloves such as neoprene or PVC where contact is possible.
Eye Protection	Splash-proof goggles.
Skin Protection	Appropriate protective clothing as needed to minimize skin contact.

**Prod.Name:** Custom Brand Antifreeze/Coolant  
**Manufacturer:** Honeywell Consumer Products Group  
**HMCS ID:** 1193739  
**SUC:** 04 - Metal Working Fluids and Lubricants

## MATERIAL SAFETY DATA SHEET

**Revision:** 17.May.2011  
**Effective:** 17.May.2011  
**Print Date:** 16.Aug.2011  
**Page:** 5 of 8

### 9 PHYSICAL AND CHEMICAL PROPERTIES

#### APPEARANCE

**Color:** Green or Yellow

**Odor:** Characteristic

#### Comment:

Physical state: Liquid.

#### PHYSICAL PROPERTIES

##### pH Value:

Concentrate	Range	8.7	9.2
-------------	-------	-----	-----

##### Changes of State:

Boiling Point	=	340	°F	171 C.
Melting/Freezing Point	=	-36	°F	-38 C. Melting point.

##### Vapor Pressure:

Not  
Determined

##### Vapor Density:

Not  
Determined

##### Evaporation Rate:

Not  
Determined

##### Specific Gravity:

Range	1.07	1.14
-------	------	------

##### Solubility:

Water Complete.

##### Viscosity:

Not  
Determined

##### Total Amount Of::

Percent Volatile	Not Determined
------------------	-------------------

##### Additional Chemical and Physical Data:

COEFFICIENT OF WATER/	Not
OIL DISTRIBUTION:	Determined

### 10 STABILITY AND REACTIVITY

#### STABILITY INFORMATION

**Stability Under Normal Conditions:** Stable

#### Conditions to Avoid:

None.

#### Incompatible Materials:

Normally unreactive, however, avoid strong bases at high temperatures, strong acids, strong oxidizing agents, and materials reactive with hydroxyl compounds.

#### Hazardous Polymerization:

Will not occur.

#### HAZARDOUS DECOMPOSITION

#### Reactions:

<u>Type of Reaction</u>	<u>Reaction Products</u>
-------------------------	--------------------------

**Prod.Name:** Custom Brand Antifreeze/Coolant  
**Manufacturer:** Honeywell Consumer Products Group  
**HMCS ID:** 1193739  
**SUC:** 04 - Metal Working Fluids and Lubricants

## MATERIAL SAFETY DATA SHEET

**Revision:** 17.May.2011  
**Effective:** 17.May.2011  
**Print Date:** 16.Aug.2011  
**Page:** 6 of 8

### 10 STABILITY AND REACTIVITY

#### HAZARDOUS DECOMPOSITION

##### Reactions:

<u>Type of Reaction</u>	<u>Reaction Products</u>
Thermal Decomposition	HAZARDOUS COMBUSTION PRODUCTS: Burning may produce carbon monoxide and carbon dioxide.
Decomposition	Carbon monoxide, carbon dioxide.

### 11 TOXICOLOGICAL INFORMATION

#### SCIENTIFIC OBSERVATIONS

##### LETHAL LIMIT VALUES

##### Data By Chemical:

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Exposure Routes</u>	<u>Type</u>	<u>Prefix</u>	<u>Value</u>	<u>Unit</u>	<u>Species</u>
ETHYLENE GLYCOL	107-21-1	oral	LD50	=	4700	mg/kg	Rat
ETHYLENE GLYCOL	107-21-1	Skin Contact	LD50	=	9530	mg/kg	Rabbit
DIETHYLENE GLYCOL	111-46-6	oral	LD50	=	12565	mg/kg	Rat
DIETHYLENE GLYCOL	111-46-6	Skin Contact	LD50	=	11890	mg/kg	Rabbit

#### CLASSIFICATION OF INGREDIENTS

##### Carcinogenicity:

None of the components of these products is listed as a carcinogen or suspected carcinogen by IARC, NTP or OSHA.

Two chronic feeding studies, using rats and mice, have not produced any evidence that ethylene glycol (107-21-1) causes dose-related increases in tumor incidence or a different pattern of tumors compared with untreated controls. The absence of carcinogenic potential for ethylene glycol has been supported by numerous invitro genotoxicity studies showing that it does not produce mutagenic or clastogenic effects.

This product contains less than 0.3% tolytriazole which has demonstrated mutagenic activity in a bacterial test system. A correlation has been established between mutagenic activity and carcinogenic activity for many chemicals. Tolytriazole has not been identified as a carcinogen or probable carcinogen by NTP, IARC or OSHA.

CALIFORNIA PROPOSITION 65: The normal consumer use of this product does not result in exposures to chemicals known to the State of California to cause Cancer above the significant risk level for carcinogens. Therefore, no warnings are required for consumer packages. Industrial or other occupational use of this product at higher frequency and using larger quantities of this product may result in exposures exceeding these levels and are labeled accordingly.

##### Reproductive Effects:

Ethylene glycol (107-21-1) has been found to cause birth defects in laboratory animals. The significance of this finding to humans has not been determined.

##### Comment:

Reproductive Effects Continued: CALIFORNIA PROPOSITION 65: The normal consumer use of this product does not result in exposures to chemicals known to the State of California to cause Reproductive Harm above the maximum allowable dose levels for reproductive toxins. Therefore, no warnings are required for consumer packages. Industrial or other occupational use of this product at higher frequency and using larger quantities of this product may result in exposures exceeding these levels and are labeled accordingly.

### 12 ECOLOGICAL INFORMATION

#### ECOTOXICITY

##### Comment:

Ethylene Glycol (107-21-1):

LC50 Goldfish: 5,000 mg/L/24 hr. at 20 C static conditions.

Toxicity threshold (cell multiplication inhibition test):

Bacterial (Pseudomonas putida): 10,000 mg/l

Protozoa (Entosiphon sulcatum and Uronema parduczi; Chatton-Lwofl): >10,000 mg/l

Algae (Microcystis aeruginosa): 2,000 mg/l

**Prod.Name:** Custom Brand Antifreeze/Coolant  
**Manufacturer:** Honeywell Consumer Products Group  
**HMCS ID:** 1193739  
**SUC:** 04 - Metal Working Fluids and Lubricants

## MATERIAL SAFETY DATA SHEET

**Revision:** 17.May.2011  
**Effective:** 17.May.2011  
**Print Date:** 16.Aug.2011  
**Page:** 7 of 8

### 12 ECOLOGICAL INFORMATION

#### ECOTOXICITY

**Comment:**

Green algae (Scenedesmus quadricauda): >10,000 mg/l

### 13 DISPOSAL CONSIDERATIONS

**Waste Disposal Information:**

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

### 14 TRANSPORT INFORMATION

**DOT Information:**

U.S. DOT HAZARD CLASSIFICATION: Not Regulated (unless package contains a reportable quantity)

**DOT Shipping Name:**

RQ, Environmentally hazardous substance, liquid, n.o.s. (Ethylene glycol)

**DOT Hazard Class:**

9

**DOT UN Code:**

UN3082

**DOT Packing Group:**

III

**Comment:**

DOT MARINE POLLUTANTS: This product does not contain Marine Pollutants as defined in 49 CFR 171.8.

IMDG CODE SHIPPING CLASSIFICATION: Not Regulated

### 15 REGULATORY INFORMATION

#### LABELLING

**Hazard Codes:**

NFPA Flammability	1
NFPA Health	2
NFPA Reactivity	0

#### NATIONAL REGULATIONS

**SARA 311/312:** Yes

**SARA 313:** Yes

**Immediate Health:** Yes

**Delayed Health:** Yes

**Fire:** No

**Sudden Pressure Release:** No

**Reactive:** No

**Other Regulation:**

EPA SARA 313

This Product Contains the Following Chemicals Subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372):

Ethylene Glycol (107-21-1) 80-95%.

#### 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

Spills of this product over the RQ (reportable quantity) must be reported to the National Response Center. The RQ for this product, based

**Prod.Name:** Custom Brand Antifreeze/Coolant  
**Manufacturer:** Honeywell Consumer Products Group  
**HMCS ID:** 1193739  
**SUC:** 04 - Metal Working Fluids and Lubricants

## MATERIAL SAFETY DATA SHEET

**Revision:** 17.May.2011  
**Effective:** 17.May.2011  
**Print Date:** 16.Aug.2011  
**Page:** 8 of 8

### 15 REGULATORY INFORMATION

#### NATIONAL REGULATIONS

**Other Regulation:**

on the RQ for Ethylene Glycol (95% maximum) of 5,000 lbs., is 5,263 lbs. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

EPA TSCA INVENTORY

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

#### STATE/LOCAL REGULATIONS

**Comment:**

CALIFORNIA PROPOSITION 65: The normal consumer use of this product does not result in exposures to chemicals known to the State of California to cause Cancer and/or Reproductive Harm above the significant risk level for carcinogens or the maximum allowable dose levels for reproductive toxins. Therefore, no warnings are required for consumer packages. Industrial or other occupational use of this product at higher frequency and using larger quantities of this product may result in exposures exceeding these levels and are labeled accordingly.

---

### 16 OTHER INFORMATION

---