



# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Product Name** A/C EasySeal (4050-06)  
**CAS #** Mixture  
**Product use** Leak Sealant for refrigeration and AC systems  
**Manufacturer** Nu-Calgon  
2008 Altom Court  
St. Louis, MO 63146 US  
Phone: 314-469-7000 / 800-554-5499  
Emergency Phone: 1-800-424-9300 (CHEMTREC)

## 2. Hazards Identification

**Emergency overview** DANGER  
EYE IRRITANT. Skin irritation possible with prolonged exposure.  
Extremely Flammable Aerosol.  
Contents under pressure.  
Containers may explode when heated.

**Potential short term health effects**

**Routes of exposure** Eye, Skin contact, Inhalation, Ingestion.

**Eyes** Contact with liquid or mist will irritate the eyes.

**Skin** Contact with liquid may cause skin irritation.

**Inhalation** Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effects (headache, dizziness).

**Ingestion** Not a normal route of exposure. May cause stomach distress, nausea or vomiting.

**Target organs** Blood. Eyes. Liver. Respiratory system. Skin.

**Chronic effects** Prolonged or repeated exposure can cause drying, defatting and dermatitis.

**Signs and symptoms** Symptoms may include redness, edema, drying, defatting and cracking of the skin. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

**OSHA Regulatory Status** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**Potential environmental effects** See section 12.

## 3. Composition / Information on Ingredients

Ingredient(s)	CAS #	Percent
Butane	106-97-8	10 - 30
Propane	74-98-6	10 - 30
Ethanol	64-17-5	1 - 5

## 4. First Aid Measures

**First aid procedures**

**Eye contact** Immediately flush with cool water. Remove contact lenses, if applicable, and continue flushing for 15 minutes. Obtain medical attention immediately.

**Skin contact** Flush with cool water. Wash with soap and water. Obtain medical attention if irritation persists.

**Inhalation** If symptoms develop, move victim to fresh air. If symptoms persist, obtain medical attention. If breathing has stopped, trained personnel should administer CPR immediately.

**Ingestion** Do not induce vomiting. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.

**Notes to physician** Symptoms may be delayed.

**General advice**

Do not puncture or incinerate container. Keep away from sources of ignition. No smoking. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

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## 5. Fire Fighting Measures

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<b>Flammable properties</b>	Flammable aerosol by flame projection test.
<b>Extinguishing media</b>	
<b>Suitable extinguishing media</b>	Carbon dioxide. Dry chemical. Foam. Water Fog.
<b>Unsuitable extinguishing media</b>	Not available
<b>Protection of firefighters</b>	
<b>Specific hazards arising from the chemical</b>	Contents under pressure. Pressurized container may explode when exposed to heat or flame. Cool containers with flooding quantities of water until well after fire is out.
<b>Protective equipment for firefighters</b>	Firefighters should wear full protective clothing including self contained breathing apparatus.
<b>Hazardous combustion products</b>	May include and are not limited to: Oxides of silicon. Oxides of carbon.
<b>Explosion data</b>	
<b>Sensitivity to mechanical impact</b>	Not available
<b>Sensitivity to static discharge</b>	Not available

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## 6. Accidental Release Measures

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<b>Personal precautions</b>	Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.
<b>Environmental precautions</b>	Prevent further leakage or spillage if safe to do so. Do not contaminate water.
<b>Methods for containment</b>	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas.
<b>Methods for cleaning up</b>	Before attempting clean up, refer to hazard data given above. Remove sources of ignition. Although the chance of a significant spill or leak is unlikely in aerosol containers, in the event of such an occurrence, absorb spilled material with a non-flammable absorbent such as sand or vermiculite.

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## 7. Handling and Storage

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<b>Handling</b>	Use good industrial hygiene practices in handling this material. Pressurized container: Do not pierce or burn, even after use. Use only with adequate ventilation. When using do not eat or drink. Avoid contact with skin and clothing. Avoid contact with eyes. Keep container tightly closed. Wash thoroughly after handling.
<b>Storage</b>	Keep out of reach of children. Keep away from heat, open flames or other sources of ignition. Protect from sunlight. Do not expose to temperatures exceeding 122°F (50°C).

## 8. Exposure Controls / Personal Protection

Exposure limits Ingredient(s)	Exposure Limits
Butane	<b>ACGIH-TLV</b> TWA: 1000 ppm <b>OSHA-PEL</b> Not established
Ethanol	<b>ACGIH-TLV</b> TWA: 1000 ppm STEL: 1000 ppm <b>OSHA-PEL</b> TWA: 1000 ppm
Propane	<b>ACGIH-TLV</b> TWA: 1000 ppm <b>OSHA-PEL</b> TWA: 1000 ppm
<b>Engineering controls</b>	General ventilation normally adequate.
<b>Personal protective equipment</b>	
<b>Eye / face protection</b>	Wear safety glasses with side shields.
<b>Hand protection</b>	Rubber gloves. Confirm with a reputable supplier first.
<b>Skin and body protection</b>	As required by employer code.
<b>Respiratory protection</b>	Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.
<b>General hygiene considerations</b>	Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

## 9. Physical and Chemical Properties

<b>Appearance</b>	Compressed liquefied gas
<b>Color</b>	Colorless
<b>Form</b>	Spray
<b>Odor</b>	Amine
<b>Odor threshold</b>	Not available
<b>Physical state</b>	Gas
<b>pH</b>	Not available
<b>Melting point</b>	Not available
<b>Freezing point</b>	Not available
<b>Boiling point</b>	143 °F (61.66 °C)
<b>Pour point</b>	Not available
<b>Evaporation rate</b>	< 1
<b>Flash point</b>	132.23 °F (55.68 °C) Tag Closed Cup
<b>Auto-ignition temperature</b>	Not available
<b>Flammability limits in air, lower, % by volume</b>	Not available
<b>Flammability limits in air, upper, % by volume</b>	Not available
<b>Vapor pressure</b>	116.63 HPa
<b>Vapor density</b>	> 1 (Air=1)
<b>Specific gravity</b>	9.1
<b>Octanol/water coefficient</b>	Not available
<b>Solubility (H2O)</b>	Not available
<b>VOC (Weight %)</b>	Not available
<b>Viscosity</b>	Not available

## 10. Stability and Reactivity

<b>Reactivity</b>	This product may react with strong oxidizing agents.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Conditions to avoid</b>	Aerosol containers are unstable at temperatures above 49°C (120.2°F). Do not mix with other chemicals.
<b>Incompatible materials</b>	Caustics. Acids. Oxidizers.
<b>Hazardous decomposition products</b>	Oxides of silicon. May include and are not limited to: Oxides of carbon.

## 11. Toxicological Information

### Component analysis - LC50

Ingredient(s)	LC50
Butane	Not available
Ethanol	31623 ppm rat
Propane Not	available

### Component analysis - Oral LD50

Ingredient(s)	LD50
Butane	Not available
Ethanol	3450 mg/kg mouse; 7060 mg/kg rat
Propane Not	available

### Effects of acute exposure

<b>Eye</b>	Contact with liquid or mist will irritate the eyes.
<b>Skin</b>	Contact with liquid may cause skin irritation.
<b>Inhalation</b>	Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effects (headache, dizziness).
<b>Ingestion</b>	Not a normal route of exposure. May cause stomach distress, nausea or vomiting.
<b>Sensitization</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Chronic effects</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Carcinogenicity</b>	See below.
<b>ACGIH - Threshold Limit Values - Carcinogens</b>	
Ethanol	64-17-5 A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

<b>Mutagenicity</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Reproductive effects</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Teratogenicity</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Name of Toxicologically Synergistic Products</b>	Not available

## 12. Ecological Information

<b>Ecotoxicity</b>	Components of this product have been identified as having potential environmental concerns.	
<b>Ecotoxicity - Freshwater Fish - Acute Toxicity Data</b>		
Ethanol	64-17-5	96 Hr LC50 Oncorhynchus mykiss: 12.0 - 16.0 mL/L [static]; 96 Hr LC50 Pimephales promelas: >100 mg/L [static]; 96 Hr LC50 Pimephales promelas: 13400 - 15100 mg/L [flow-through]
<b>Ecotoxicity - Water Flea - Acute Toxicity Data</b>		
Ethanol	64-17-5	48 Hr LC50 Daphnia magna: 9268 - 14221 mg/L; 24 Hr EC50 Daphnia magna: 10800 mg/L; 48 Hr EC50 Daphnia magna: 2 mg/L [Static]
<b>Persistence / degradability</b>	Not available	

<b>Bioaccumulation / accumulation</b>	Not available
<b>Mobility in environmental media</b>	Not available
<b>Environmental effects</b>	Not available
<b>Aquatic toxicity</b>	Not available
<b>Partition coefficient</b>	Not available
<b>Chemical fate information</b>	Not available
<b>Other adverse effects</b>	Not available

### 13. Disposal Considerations

<b>Disposal instructions</b>	Dispose in accordance with all applicable regulations.
<b>Waste from residues / unused products</b>	Not available
<b>Contaminated packaging</b>	Not available

### 14. Transport Information

**U.S. Department of Transportation (DOT)**

Consumer Commodity ORM-D or Limited Quantity / UN1950

**Transportation of Dangerous Goods (TDG - Canada)**

Consumer Commodity

### 15. Regulatory Information

**Canadian federal regulations** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

**Canada - CEPA - High Priority Chemicals as Identified by DSL Categorization**

Butane 106-97-8 Batch 4, published November 17, 2007

**Canada - WHMIS - Ingredient Disclosure List**

Butane 106-97-	-8	1 %
Ethanol 64-17-	5	0.1 %

**WHMIS status** Controlled

**WHMIS classification** Class A - Compressed Gas, Class B - Division 5 - Flammable Aerosol, Class D - Division 2B

**WHMIS labeling**



**Occupational Safety and Health Administration (OSHA)**

**29 CFR 1910.1200 hazardous chemical** Yes

**US Federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**CERCLA (Superfund) reportable quantity**

None

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories** Immediate Hazard - Yes  
 Delayed Hazard - Yes  
 Fire Hazard - Yes  
 Pressure Hazard - Yes  
 Reactivity Hazard - No

**Section 302 extremely hazardous substance** No

**Section 311 hazardous chemical** Yes

**Clean Air Act (CAA)** Not available

**Clean Water Act (CWA)** Not available

**State regulations**

See below

**U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances**

Butane 106-97-8 Present

**U.S. - Massachusetts - Right To Know List**Butane 106-97-8 Present  
Ethanol 64-17-5 Teratogen  
Propane 74-98-6 Present**U.S. - Minnesota - Hazardous Substance List**Butane 106-97-8 Present  
Ethanol 64-17-5 Present  
Propane 74-98-6 Simple asphyxiant**U.S. - New Jersey - Right to Know Hazardous Substance List**Butane 106-97-8 sn 0273  
Ethanol 64-17-5 sn 0844  
Propane 74-98-6 sn 1594**U.S. - Pennsylvania - RTK (Right to Know) List**Butane 106-97-8 Present  
Ethanol 64-17-5 Present  
Propane 74-98-6 Present**U.S. - Rhode Island - Hazardous Substance List**Butane 106-97-8 Toxic; Flammable  
Ethanol 64-17-5 Toxic; Flammable  
Propane 74-98-6 Toxic; Flammable**Inventory name**

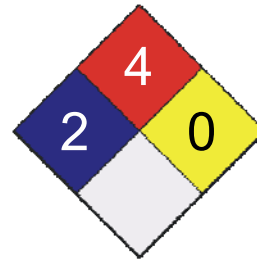
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

**16. Other Information**

LEGEND HMIS/NFPA
Severe 4
Serious 3
Moderate 2
Slight 1
Minimal 0

Health	2
Flammability	4
Physical Hazard	0
Personal Protection	X

**Disclaimer**

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

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15-Jun-2015

**Prepared by**

Nu-Calgon Technical Service (314) 469-7000

**Other information**

For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.

This MSDS conforms to the ANSI Z400.1/Z129.1-2010 Standard.