



Safety Data Sheet

Issue Date: 29-Oct-2013

Revision Date: 31-Oct-2013

Version 1

1. IDENTIFICATION

Product Identifier

Product Name Cal-Shield

Other means of identification

Part Number 4148-01, 4148-08, 4148-32.

Recommended use of the chemical and restrictions on use

Recommended Use Coil protectant. For professional use only.

Details of the supplier of the safety data sheet

Supplier Address

Nu-Calgon
2008 Altom Court
St. Louis, MO 63146
www.nucalgon.com

Emergency Telephone Number

Company Phone Number (314) 469-7000

(800) 554-5499

Emergency Telephone (24 hr) Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Appearance Light straw liquid cloudy

Physical State Liquid

Odor None

Classification

This chemical does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). However, this Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

3. COMPOSITION/INFORMATION ON INGREDIENTS

The product contains no substances which at their given concentration, are considered to be hazardous to health.

4. FIRST-AID MEASURES

First Aid Measures

Eye Contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if necessary.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Consult a physician if necessary.
Inhalation	Remove to fresh air. Get medical attention if necessary.
Ingestion	IF SWALLOWED: rinse mouth. Get medical attention if necessary.

Most important symptoms and effects

Symptoms Direct contact with eyes may cause temporary irritation.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

None known.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Use personal protective equipment as required.

Environmental Precautions Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed and store in a cool, dry and well-ventilated place. Protect from freezing. Keep out of the reach of children.

Incompatible Materials Oxidizing agents. Bleach. Do not mix with other chemicals or cleaners.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering Controls Ensure adequate ventilation, especially in confined areas. Eyewash stations. Showers.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Wear approved safety goggles where a splash hazard exists.

Skin and Body Protection Wear suitable protective clothing.

Respiratory Protection Ensure adequate ventilation, especially in confined areas.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid	Odor	None
Appearance	Light straw liquid cloudy	Odor Threshold	Not determined
Color	Light straw		

Property	Values	Remarks • Method
pH	3.3-4.8	
Melting Point/Freezing Point	Not determined	
Boiling Point/Boiling Range	100 °C / 212 °F	IBP
Flash Point	None to boiling	Tag Closed Cup
Evaporation Rate	Equal to water	
Flammability (Solid, Gas)	Liquid-not applicable	
Upper Flammability Limits	Not determined	
Lower Flammability Limit	Not determined	
Vapor Pressure	Not determined	
Vapor Density	Not determined	
Specific Gravity	1.01	
Water Solubility	Soluble in water	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Auto-ignition Temperature	Not determined	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	Water thin (<5 cps)	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	
Density	8.39 lb/gal	

10. STABILITY AND REACTIVITY

Reactivity
Not reactive under normal conditions.

Chemical Stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid

Keep out of reach of children. Keep from freezing.

Incompatible Materials

Oxidizing agents. Bleach. Do not mix with other chemicals or cleaners.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Avoid contact with eyes. **Skin**

Contact Avoid contact with skin.

Inhalation Avoid breathing vapors or mists.

Ingestion Do not taste or swallow.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Water	> 90 mL/kg (Rat)	-	-
7732-18-5			
Proprietary	> 90 mL/kg (Rat)	-	-

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Component Information

Not available

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Not determined

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated Packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

<u>Note</u>	Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.
<u>DOT</u>	Not regulated
<u>IATA</u>	Not regulated
<u>IMDG</u>	Not regulated

15. REGULATORY INFORMATION

International Inventories

Not determined

Legend:

- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*
- ENCS - Japan Existing and New Chemical Substances*
- IECSC - China Inventory of Existing Chemical Substances*
- KECL - Korean Existing and Evaluated Chemical Substances*
- PICCS - Philippines Inventory of Chemicals and Chemical Substances*

US Federal Regulations

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

16. OTHER INFORMATION

<u>NEPA</u>	Health Hazards	Flammability	Instability	Special Hazards
	1	0	0	None
<u>HMIS</u>	Health Hazards	Flammability	Physical Hazards	Personal Protection
	1	0	0	B

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 Revision Note: New format

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet



MATERIAL SAFETY DATA SHEET

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Company Name Nu-Calgon Wholesaler, Inc.	Phone Number (314) 469-7000 / (800) 554-5499	CHEMTREC (800) 424-9300		
Street Address 2008 Altom Court	City St. Louis	State MO	Postal Code 63146-4151	Last Update 02/28/2007
Product Name Cal-Shield	Product Number 4148	Product Use Coil Protector		EPA Registration # NA

SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients	% By Wt.	CAS Number	TLV	PEL
Telomer B Phosohate Diethanolamine Salts	2-4%	65530-63-4 ; 65530-64-5 ; 65530-74-7	0.1-1 mg/m3 (TWA) based on similar materials by manufacturer (Dupont)	0.1-1 mg/m3 (TWA) based on similar materials by manufacturer (Dupont)
Isopropanol	1-3%	7732-18-5	200ppm (TWA - 8hrs)	400ppm (TWA-8hrs)
Water	85 -95%	7732-18-5	None Established	None Established

SECTION 3 – HAZARD IDENTIFICATION

Emergency Overview: Do not get in eyes, on skin or clothing. Avoid breathing vapor or mist. Avoid circumstances that produce respirable particles unless suitable ventilation and respirator are used. Use only with adequate ventilation and appropriate personal protection equipment. See section 16 of this MSDS.
Potential Health Effects
Eyes: Prolonged or repeated contact with eyes may cause irritation.
Skin: Prolonged or repeated contact with skin may cause mild, transient irritation.
Ingestion: Ingestion may cause moderate gastrointestinal irritation, abdominal pain ab vomiting, diarrhea.
Inhalation: Inhalation of large amounts may cause irritation of nose, throat, or lung. Inhalation of respirable particles may be toxic to lungs. Symptoms may be slow developing but include, dizziness, CNS depression, as well as shortness of breath requiring prompt medical attention. Overexposure may be fatal.
Chronic Exposure: None currently known.
Carcinogenicity: None
Medical Conditions Aggravated by Exposure: Respiratory illnesses.

SECTION 4 – FIRST AID MEASURES

Eyes: Flush eyes with water for at least 15 minutes and call a physician immediately.
Skin: Wash affected areas with large amounts of soap and water. If irritation persists call a physician.
Ingestion: Do NOT induce vomiting. Aspiration hazard. Dilute by drinking water. Call a physician immediately. Activated charcoal may be beneficial (Mix 50g in 400 ml H2O and administer 5ml/kg, or 350ml for an average adult.
Inhalation: Remove to fresh air. Start artificial respiration if necessary. Oxygen may be administered. Call a physician.

SECTION 5 – FIREFIGHTING MEASURES

Flash Point: None to Boiling°F
Autoignition Temp: N/A°C/N/A°F
Hazardous Products of Combustion: Burning may produce oxides of carbon, hydrogen fluoride, toxic gases and other substances.
Flammable Limits in Air: N/A
Extinguishing Media: Product is non-combustible. Water Spray (Fog), Dry Chemical, CO2, or Foam may be used where product is stored.
Fire and Explosion Hazards: Burning may produce oxides of carbon, hydrogen fluoride, toxic gases and other substances.
Special Firefighting Procedures: Do not enter confined fire-spaces without protective clothing and self-contained air supply.

MSDS Number – Z0216

Sid Harvey Item number – 4148-08, 4148-32

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spill or Leak: Do not discharge into lakes, streams, ponds or public waters. Stop leak if you can do it without risk. Dike ahead of large spills. Mop, pump or take up with inert absorbent material and place into containers for disposal.

SECTION 7 – HANDLING AND STORAGE

Handling Procedures and Equipment: Use only with adequate ventilation to control mists / respirable particles / vapors below exposure limits (see MSDS sect 16). Wash thoroughly after handling. Avoid contact with eyes, skin and clothing. Harmful if swallowed. D.O.T. Classification - not regulated

Storage Requirements: Keep container closed when not in use. Store in a well ventilated place. Do not reuse empty container - triple rinse and offer for reconditioning or proper disposal. If frozen, thaw and agitate before use.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection: Where there is the potential for for airborne exposures wear NIOSH approved respiratory protection. Avoid breathing of any respiratable particles.

Eye Protection: Safety Glasses or Chemical Splash Goggles

Protective Clothing: Impervious protective clothing appropriate to minimize contact. Protective Gloves: Rubber/PVC

Exposure Guidelines: None Established

Specific Engineering Controls (such as ventilation, enclosed process): Insure adequate ventilation. Where there there is the potential for for airborne exposures wear NIOSH approved respiratory protection. Avoid breathing of any respiratable particles.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: Liquid	Freezing Point: 0°C/32°F	% Volatile by Weight: ~90+%
Color: Amber	Vapor Density [air =1]: Not Determined	Evaporation Rate: (vs. H ₂ O): About the same.
Odor: Characteristic Odor	Vapor Pressure: Not Determined	Specific Gravity: (H ₂ O=1): 1.01 (+/-0.05)
Boiling Point: 100°C/212 (IBP)°F	Solubility in Water: Complete	pH (concentrate): 7.9 (+/-0.5)

SECTION 10 – STABILITY AND REACTIVITY

Chemical Stability: Stable under normal conditions of use and storage.

Hazardous Polymerization: None

Incompatibilities: Oxidizing agents.

Reactive Conditions to avoid: Insure adequate ventilation. Where there there is the potential for for airborne exposures wear NIOSH approved respiratory protection. Avoid breathing of any respiratable particles.

Decomposition Products: Burning may produce oxides of carbon, hydrogen fluoride, toxic gases and other substances.

SECTION 11 – TOXICOLOGICAL INFORMATION

Hazardous Ingredients	CAS #	EINECS #	LD 50 of Ingredient (Specify Species)	LC50 of Ingredient (Specify Species)
Telomer B Phosohate Diethanolamine Salts	65530-63-4 ; 65530-64-5 ; 65530-74-7		LD50= NA	LC50 = NA
Isopropanol			LD50= 4700 mg/kg (rat)	LC50 = 16,000ppm (4 hours) (rat)

SECTION 12 – ECOLOGICAL INFORMATION

Hazardous Ingredients	Aquatic Toxicity Data
Telomer B Phosohate Diethanolamine Salts	LC50 = NA
Isopropanol	LC50=3,200 mg/l (96 hrs) Fathead Minnow

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste Disposal: Dispose of in an approved waste facility according to Federal, State and local regulations. See product label for specific instructions.

SECTION 14 – TRANSPORTATION INFORMATION

Special Shipping Information: No Data.

<u>Purview</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
DOT (Land)	Not Regulated			
IMO (Water)	No Data.			
ICAO (Air)	No Data.			

SECTION 15 – REGULATORY INFORMATION

WHMIS Classification: (Workplace Hazardous Material Information System)	Class D - Division 2B - Eye Irritant
SARA Title III: (Superfund Amendments & Reauthorization Act)	Contains no Section 313 listed substances subject to reporting requirements.
OSHA: (Occupational Safety & Health Administration)	OSHA Hazardous - Acute hazard
TSCA: (Toxic Substance Control Act)	All ingredients are TSCA registered.
VOC: (volatile Organic Compounds)	No Data
CPR: (Canadian Controlled Products Regulations)	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations
EINECS: (European Inventory of Existing Commercial Chemical Substances)	No Data.
DSL / NDSL: (Canadian Domestic Substance List)(Non-Domestic Substance List)	All ingredients in this product are listed on the DSL.
CERCLA: (Comprehensive Response Compensation & Liability Act)	NA
IDL: (Canadian Ingredient Disclosure List)	No Data.
NFPA (HMIS) Rating: (Hazardous Materials Identification System)	Health = 2 Flammability = 0 Reactivity = 0 Special Hazard = X

SECTION 16 – OTHER INFORMATION

Air monitoring studies conducted at customer sites indicate that use of the recommended low pressure (<60psi) airless type, garden type or deck specific hand pump sprayer with a spray tip orifice of 0.031 inches in diameter does not produce respirable size aerosol particle concentrations near the TLV or PEL.

The information contained herein is based on the data available to us and is believed to be correct. However, Nu-Calgon Wholesaler Inc. makes no warranty, expressed, or implied, regarding the accuracy of this data or the results to be obtained from the use thereof. Nu-Calgon Wholesaler Inc. assumes no liability for injury from the use of the product described herein.