

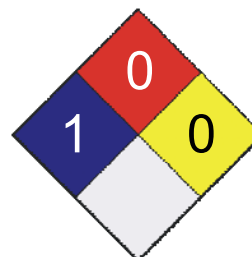
MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product Name Seal-Loc (4350)
CAS # Mixture
Product use Thread Sealing Compound
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)

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

Health	* 1
Flammability	1
Physical Hazard	0
Personal Protection	X



2. Hazards Identification

Emergency overview WARNING
 EYE AND SKIN IRRITANT.
 CONTAINS MATERIAL WHICH MAY CAUSE CANCER. May cause chronic toxic effects.

Potential short term health effects

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

Eyes May cause irritation.

Skin May cause irritation.

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

Ingestion May cause stomach distress, nausea or vomiting.

Target organs Eyes. Lungs. Respiratory system. Stomach.

Chronic effects Prolonged or repeated exposure can cause drying, defatting and dermatitis. Fibrosis was observed in rats exposed to 6 mg/m³ of hydrous magnesium silicate (talc) for 113 or 122 weeks. Chronic respiratory disease has been observed in workers exposed to up to 3.0 mg/m³ of airborne talc ore free of asbestos and silica.

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.

3. Composition / Information on Ingredients

Ingredient(s)	CAS #	Percent
Foots oil (petroleum)	64742-67-2	30 - 60
Lubricating oils, petroleum, hydrotreated spent	64742-58-1	30 - 60
Residual oils (petroleum), hydrotreated	64742-57-0	30 - 60
Residual oils (Petroleum), solvent-dewaxed	64742-62-7	30 - 60
Hydrous magnesium silicate	14807-96-6	10 - 30
Kaolin	1332-58-7	10 - 30
P-Aramide	26125-61-1	1 - 5
Titanium oxide	13463-67-7	1 - 5
Silica, amorphous, fumed, crystalline free	112945-52-5	0.5 - 1.5

4. First Aid Measures

First aid procedures

Eye contact	Flush with cool water. Remove contact lenses, if applicable, and continue flushing. Obtain medical attention if irritation persists.
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.
Ingestion	Do not induce vomiting. Rinse mouth with water, then drink one or two glasses of water. Obtain medical attention. Never give anything by mouth if victim is unconscious, or is convulsing.

Notes to physician

Symptoms may be delayed.

General advice

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.

5. Fire Fighting Measures

Flammable properties

Not flammable by WHMIS/OSHA criteria.

Extinguishing media

Suitable extinguishing media Fog. Water spray. Carbon dioxide. Dry chemical. Foam.

Unsuitable extinguishing media Not available

Protection of firefighters

Specific hazards arising from the chemical Not available

Protective equipment for firefighters Firefighters should wear full protective clothing including self contained breathing apparatus.

Hazardous combustion products

May include and are not limited to: Oxides of carbon.

Explosion data

Sensitivity to mechanical impact Not available

Sensitivity to static discharge Not available

6. Accidental Release Measures

Personal precautions

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.

Methods for containment

Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up

Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labelled containers. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice. Never return spills in original containers for re-use.

7. Handling and Storage

Handling

Use good industrial hygiene practices in handling this material.

Storage

Keep out of reach of children. Store in a closed container away from incompatible materials.

8. Exposure Controls / Personal Protection

Exposure limits Ingredient(s)	Exposure Limits
Foots oil (petroleum)	ACGIH-TLV Not established OSHA-PEL Not established
Hydrous magnesium silicate	ACGIH-TLV TWA: 2 mg/m ³ OSHA-PEL Not established
Kaolin	ACGIH-TLV TWA: 2 mg/m ³ OSHA-PEL TWA: 15 mg/m ³
Lubricating oils, petroleum, hydrotreated spent	ACGIH-TLV Not established OSHA-PEL Not established
P-Aramid	ACGIH-TLV Not established OSHA-PEL Not established
Residual oils (petroleum), hydrotreated	ACGIH-TLV Mist: 5 mg/m ³ OSHA-PEL Not established
Residual oils (Petroleum), solvent-dewaxed	ACGIH-TLV Not established OSHA-PEL Not established
Silica, amorphous, fumed, crystalline free	ACGIH-TLV Not established OSHA-PEL TWA: 6 mg/m ³
Titanium oxide	ACGIH-TLV TWA: 10 mg/m ³ OSHA-PEL TWA: 15 mg/m ³
Engineering controls	General ventilation normally adequate.
Personal protective equipment	
Eye / face protection	Wear safety glasses with side shields.
Hand protection	Rubber gloves. Confirm with a reputable supplier first.
Skin and body protection	As required by employer code.
Respiratory protection	Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.
General hygiene considerations	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 & Chemical Properties

Appearance	paste
Color	Blue
Form	paste
Odor	Odorless
Odor threshold	Not available
Physical state	Liquid
pH	Not available
Melting point	Not available
Freezing point	Not available
Boiling point	Not available
Flash point	Not available
Evaporation rate	Not available
Flammability limits in air, lower, % by volume	Not available
Flammability limits in air, upper, % by volume	Not available
Vapor pressure	Not available
Vapor density	Not available
Specific gravity	1.2
Octanol/water coefficient	Not available
Solubility (H ₂ O)	Insoluble
Auto-ignition temperature	Not available
VOC (Weight %)	Not available
Viscosity	Viscous
Percent volatile	Not available

10. Chemical Stability & Reactivity Information

Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Do not mix with other chemicals.
Incompatible materials	Oxidizers.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Component analysis - LC50

Ingredient(s)	LC50
Foots oil (petroleum)	Not available
Hydrous magnesium silicate	Not available
Kaolin	Not available
Lubricating oils, petroleum, hydrotreated spent	Not available
P-Aramide	Not available
Residual oils (petroleum), hydrotreated	Not available
Residual oils (Petroleum), solvent-dewaxed	2 mg/l/4h rat
Silica, amorphous, fumed, crystalline free	Not available
Titanium oxide	Not available

Component analysis - Oral LD50

Ingredient(s)	LD50
Foots oil (petroleum)	15000 mg/kg rat
Hydrous magnesium silicate	Not available
Kaolin	Not available
Lubricating oils, petroleum, hydrotreated spent	2000.0001 mg/kg rat
P-Aramide	Not available
Residual oils (petroleum), hydrotreated	> 5000 mg/kg rat
Residual oils (Petroleum), solvent-dewaxed	5000 mg/kg rat
Silica, amorphous, fumed, crystalline free	3160 mg/kg rat
Titanium oxide	24000 mg/kg rat

Effects of acute exposure

Eye	May cause irritation.
Skin	May cause irritation.
Inhalation	Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effects (headache, dizziness).
Ingestion	May cause stomach distress, nausea or vomiting.
Sensitization	Non-hazardous by WHMIS/OSHA criteria.
Chronic effects	Fibrosis was observed in rats exposed to 6 mg/m ³ of hydrous magnesium silicate (talc) for 113 or 122 weeks. Chronic respiratory disease has been observed in workers exposed to up to 3.0 mg/m ³ of airborne talc ore free of asbestos and silica.
Carcinogenicity	Contains a potential carcinogen. High concentrations of pigment-grade (powdered) and ultrafine titanium dioxide (titanium oxide) dust have caused respiratory tract cancer in rats exposed by inhalation and intratracheal instillation.

ACGIH - Threshold Limit Values - Carcinogens

Hydrous magnesium silicate	14807-96-6	A4 - Not Classifiable as a Human Carcinogen (containing no asbestos fibers); A1 - Confirmed Human Carcinogen (containing asbestos fibers)
Kaolin	1332-58-7	A4 - Not Classifiable as a Human Carcinogen
Titanium oxide	13463-67-7	A4 - Not Classifiable as a Human Carcinogen

IARC - Group 2B (Possibly Carcinogenic to Humans)

Titanium oxide	13463-67-7	Monograph 93 posted, Monograph 47 [1989]
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IARC - Group 3 (Not Classifiable)

Hydrous magnesium silicate	14807-96-6	Monograph 93 [in preparation] (inhaled), Supplement 7 [1987], Monograph 42 [1987]
P-Aramide	26125-61-1	Monograph 68 [1997] (listed under para-Aramid fibrils)
Silica, amorphous, fumed, crystalline free	112945-52-5	Monograph 68 [1997] (listed under Amorphous silica)

Mutagenicity Non-hazardous by WHMIS/OSHA criteria.

Reproductive effects Non-hazardous by WHMIS/OSHA criteria.

Teratogenicity Non-hazardous by WHMIS/OSHA criteria.

12. Ecological Information

Ecotoxicity Components of this product have been identified as having potential environmental concerns.

Ecotoxicity - Freshwater Fish Species Data

Hydrous magnesium silicate	14807-96-6	96 Hr LC50 Brachydanio rerio: >100 g/L [semi-static]
Lubricating oils, petroleum, hydrotreated spent	64742-58-1	96 Hr LC50 Brachydanio rerio: 79.6 mg/L [semi-static]; 96 Hr LC50 Pimephales promelas: 3.2 mg/L [semi-static]
Residual oils (Petroleum), solvent-dewaxed	64742-62-7	96 Hr LC50 Pimephales promelas: >5000 mg/L

Ecotoxicity - Water Flea Data

Residual oils (Petroleum), solvent-dewaxed	64742-62-7	48 Hr EC50 Daphnia magna: >1000 mg/L
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Environmental effects Not available

Aquatic toxicity Not available

Persistence / degradability Not available

Bioaccumulation / accumulation Not available

Partition coefficient	Not available
Mobility in environmental media	Not available
Chemical fate information	Not available

13. Disposal Considerations

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

14. Transport Information

U.S. Department of Transportation (DOT)	Not regulated as dangerous goods.
Transportation of Dangerous Goods (TDG - Canada)	Not regulated as dangerous goods.

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.
US Federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. CERCLA/SARA Hazardous Substances - Not applicable.
Occupational Safety and Health Administration (OSHA)	
29 CFR 1910.1200 hazardous chemical	Yes
CERCLA (Superfund) reportable quantity	None
Superfund Amendments and Reauthorization Act of 1986 (SARA)	
Hazard categories	Immediate Hazard - Yes Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - No 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
Safe Drinking Water Act (SDWA)	Not available
Drug Enforcement Agency (DEA)	Not available
Food and Drug Administration (FDA)	Not available
WHMIS status	Controlled
WHMIS classification	Class D - Division 2A, 2B
WHMIS labeling	



State regulations

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

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

Hydrous magnesium silicate 14807-96-6 Present (exempt except when inhalable dust is present or can be generated)

U.S. - Massachusetts - Right To Know List

Hydrous magnesium silicate 14807-96-6 Present (exempt when encapsulated or if particulates are not present and cannot be substantially generated through use of the product)
 Kaolin 1332-58-7 Present (dust, exempt when encapsulated or if particulates are not present and cannot be substantially generated through use of the product)
 Titanium oxide 13463-67-7 Present

U.S. - Minnesota - Hazardous Substance List

Hydrous magnesium silicate 14807-96-6 Present (fibrous, nonasbestiform, and respirable)
 Kaolin 1332-58-7 Present (dust)
 Titanium oxide 13463-67-7 Present (dust)

U.S. - New Jersey - Right to Know Hazardous Substance List

Hydrous magnesium silicate 14807-96-6 sn 1773
 Silica, amorphous, fumed, crystalline free 112945-52-5 Sn 2643 (flammable, liquid, toxic, flash point less than 23°C); sn 2642 (flammable, liquid, toxic, flash point between 23°C and 61°C); sn 2644 (liquid, toxic); sn 2645 (solid, toxic)
 Titanium oxide 13463-67-7 sn 1861

U.S. - Pennsylvania - RTK (Right to Know) List

Hydrous magnesium silicate 14807-96-6 Present
 Kaolin 1332-58-7 Present
 Titanium oxide 13463-67-7 Present

U.S. - Rhode Island - Hazardous Substance List

Hydrous magnesium silicate 14807-96-6 Toxic
 Kaolin 1332-58-7 Toxic
 Titanium oxide 13463-67-7 Toxic

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

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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Expiry date

21-Jul-2014

Prepared by

Nu-Calgon Technical Service (314) 469-7000



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 1/11/07
Product Name Seal-Loc	Product Number 4350	Product Use Thread Sealing Compound		EPA Registration # N/A

SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients	% By Wt.	CAS Number	TLV	PEL
Petroleum hydrocarbon	30-60	64742-58-1, 64742-62-7, 64742-57-0,	5 mg/m3 ACGIH/OSHA TWA (as oil mist)	No Data.
Talc	10-30	14807-96-6	2 mg/m3 ACGIH ((respirable dust)	No Data.
Clay	10-30	1332-58-7	2 mg/m3 ACGIH ((respirable dust)	No Data.
Titanium Dioxide	5-10	13463-67-7	10 mg/m3 ACGIH (respirable dust)	No Data.
Fumed Silica	1-5	112945-52-5	2 mg/m3 ACGIH (respirable dust)	No Data.

SECTION 3 – HAZARD IDENTIFICATION

Emergency Overview: May cause mild eye irritation. May cause mild skin irritation on prolonged contact. Prolonged inhalation of dusts from dried product may cause lung damage.
Potential Health Effects
Eyes: May cause mild irritation or discomfort.
Skin: Prolonged contact may cause mild irritation.
Ingestion: Swallowing may cause nausea, vomiting and diarrhea.
Inhalation: Inhalation is not a normal route of exposure for this product. Inhalation of dusts from dried product may cause irritation of the nose throat and upper respiratory tract.
Chronic Exposure: Prolonged inhalation of dusts from dried product may cause lung damage.
Carcinogenicity: None of the components is listed as a carcinogen or suspected carcinogen by IARC, NTP or OSHA.
Medical Conditions Aggravated by Exposure: None known.

SECTION 4 – FIRST AID MEASURES

Eyes: Flush victim's eyes with large quantities of water, holding the eyelids apart. Get medical attention if irritation persists.
Skin: No first aid is required. Wash with soap and water after use.
Ingestion: Do not induce vomiting. Get immediate medical attention.
Inhalation: No first aid is required. Inhalation is not a normal route of exposure for this product

SECTION 5 – FIREFIGHTING MEASURES**Flash Point:** Not applicable°F**Autoignition Temp:** Not applicable°C/Not applicable°F**Hazardous Products of Combustion:** Burning may produce carbon monoxide, carbon dioxide and unidentified hydrocarbons.**Flammable Limits in Air:** Not applicable**Extinguishing Media:** Use water fog or spray, carbon dioxide, dry chemical or foam.**Fire and Explosion Hazards:** None known.**Special Firefighting Procedures:** Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing.**SECTION 6 – ACCIDENTAL RELEASE MEASURES****Spill or Leak:** Collect with inert absorbent and place in container for disposal. Report releases as required by local, provincial and federal authorities.**SECTION 7 – HANDLING AND STORAGE****Handling Procedures and Equipment:** Avoid contact with the eyes. Keep containers closed when not in use.**Storage Requirements:** Store in a cool, dry area.**SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION****Respiratory Protection:** None normally needed.**Eye Protection:** Safety glasses recommended where contact is possible.**Protective Clothing:** None required for normal use.**Exposure Guidelines:** Rubber gloves can be worn to prevent prolonged contact.**Specific Engineering Controls (such as ventilation, enclosed process):** None required for normal use.**SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES**

Physical Form: Paste	Freezing Point: N/A°C/N/A°F	% Volatile by Weight: not determined%
Color: Blue paste	Vapor Density [air =1]: Paste	Evaporation Rate: Not applicable
Odor: odorless..	Vapor Pressure: Not applicable	Specific Gravity: 1.2
Boiling Point: Not applicable°C/Not applicable°F	Solubility in Water: Insoluble	pH (concentrate): Not determined

SECTION 10 – STABILITY AND REACTIVITY**Chemical Stability:** Stable under normal storage and handling conditions.**Hazardous Polymerization:** Will not occur.**Incompatibilities:** Avoid direct contact with open flames.**Reactive Conditions to avoid:** None**Decomposition Products:** Burning may produce carbon monoxide, carbon dioxide and unidentified hydrocarbons.**SECTION 11 – TOXICOLOGICAL INFORMATION**

Hazardous Ingredients	CAS #	EINECS #	LD 50 of Ingredient (Specify Species)	LC50 of Ingredient (Specify Species)
HEALTH HAZARDS: See Section 3.				

SECTION 12 – ECOLOGICAL INFORMATION

<u>Hazardous Ingredients</u>	<u>Aquatic Toxicity Data</u>
N/A	No ecological information known

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste Disposal: Dispose in accordance with local, state and federal environmental regulations.

SECTION 14 – TRANSPORTATION INFORMATION

Special Shipping Information: NONE

<u>Purview</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
DOT (Land)	Not regulated for transport	None	N/A	N/A
IMO (Water)	Not regulated for transport	None	N/A	N/A
ICAO (Air)	Not regulated for transport	None	N/A	N/A

SECTION 15 – REGULATORY INFORMATION

WHMIS Classification: (Workplace Hazardous Material Information System)	D-2-B
SARA Title III: (Superfund Amendments & Reauthorization Act)	Not a hazardous waste
OSHA: (Occupational Safety & Health Administration)	Non Hazardous
TSCA: (Toxic Substance Control Act)	Complies
VOC: (volatile Organic Compounds)	Not determined
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)	N/A
DSL / NDSL: (Canadian Domestic Substance List)(Non-Domestic Substance List)	All the components of this product are listed on the Canadian DSL list
CERCLA: (Comprehensive Response Compensation & Liability Act)	No Data.
IDL: (Canadian Ingredient Disclosure List)	Complies
NFPA (HMIS) Rating: (Hazardous Materials Identification System)	0, 1, 0

SECTION 16 – OTHER INFORMATION

No Data.

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.