



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product Name SCRUBS (4366)
CAS # Mixture
Product use Waterless Hand Cleaner Towels
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 CAUTION
MAY CAUSE EYE IRRITATION. MAY CAUSE SKIN IRRITATION. Contact with liquid may cause skin sensitization.

Potential short term health effects

Routes of exposure Eye. Inhalation. Ingestion.

Eyes May cause irritation.

Skin Contact with skin can cause minor irritation and allergic reaction (sensitization) in some individuals following prolonged direct contact.

Inhalation Not a normal route of exposure. May cause respiratory tract irritation.

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

Target organs Eyes. Respiratory system.

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
Limonene	5989-27-5	3 - 7
C12-15 Pareth-7	68131-39-5	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 water. In case of skin irritation, discontinue use of product.

Inhalation Not a normal route of exposure. If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.

Ingestion Not a normal route of exposure. Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.

Notes to physician Symptoms may be delayed.

General advice Avoid contact with eyes. Keep out of reach of children. Immediate medical attention is required. 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. If you feel unwell, seek medical advice (show the label where possible).

5. Fire Fighting Measures

Flammable properties Not flammable by WHMIS/OSHA criteria.

Extinguishing media**Suitable extinguishing media** Dry chemical. Carbon dioxide. Water spray. 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. Oxides of sulphur. Hydrogen sulphide.**Explosion data****Sensitivity to mechanical impact** Not available**Sensitivity to static discharge** Not available

6. Accidental Release Measures

Personal precautions Avoid contact with eyes. Avoid inhalation of vapor, fumes, dust and/or mist from the spilled material.**Environmental precautions** Do not discharge into lakes, streams, ponds or public waters.**Methods for containment** Prevent entry into waterways, sewers, basements or confined areas.**Methods for cleaning up** Pick up and discard towel.

7. Handling and Storage

Handling Avoid contact with eyes, lips and mouth.
Use good industrial hygiene practices in handling this material.
When using do not eat or drink.**Storage** Keep out of the reach of children.
Store in a closed container away from incompatible materials.
Keep away from heat, open flames or other sources of ignition.
Protect from freezing.

8. Exposure Controls / Personal Protection

Exposure limits

Ingredient(s)	Exposure Limits
C12-15 Parath-7	ACGIH-TLV Not established OSHA-PEL Not established

Limonene	ACGIH-TLV Not established OSHA-PEL Not established
----------	---

Engineering controls General ventilation normally adequate.**Personal protective equipment****Eye / face protection** Not normally required.**Hand protection** Not required.**Skin and body protection** Not normally required.**Respiratory protection** Not normally required if good ventilation is maintained.**General hygiene considerations** Avoid contact with eyes. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

Appearance Liquid saturated on wipe**Color** Opaque white**Form** Towelettes.

Odor	Citrus
Odor threshold	Not available
Physical state	Solid
pH	9.8 ± 0.5
Melting point	Not available
Freezing point	Not available
Boiling point	212.00 °F (100 °C) (Liquid)
Pour point	Not available
Evaporation rate	Not available
Flash point	None to boiling Pensky-Martens Closed Cup
Auto-ignition temperature	Not available
Flammability limits in air, lower, % by volume	Not available
Flammability limits in air, upper, % by volume	Not applicable
Vapor pressure	Not available
Vapor density	> 1
Specific gravity	0.986 (Liquid)
Octanol/water coefficient	Not available
Solubility (H2O)	Wipe is not soluble
VOC (Weight %)	< 8
Softening point	Not available
Viscosity	Not available
Percent volatile	Not available

10. Stability and Reactivity

Reactivity	This product may react with strong oxidizing agents.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Do not mix with other chemicals.
Incompatible materials	Acids. Oxidizers. Reducing agents.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon. Oxides of sulphur. Hydrogen sulphide.

11. Toxicological Information

Component analysis - LC50

Ingredient(s)	LC50
C12-15 Pareth-7	Not available
Limonene	Not available

Component analysis - Oral LD50

Ingredient(s)	LD50
C12-15 Pareth-7	1600 mg/kg rat
Limonene	4400 mg/kg rat; 5600 mg/kg mouse

Effects of acute exposure

Eye	May cause irritation.
Skin	Contact with skin can cause minor irritation and allergic reaction (sensitization) in some individuals following prolonged direct contact.
Inhalation	Not a normal route of exposure. May cause respiratory tract irritation.
Ingestion	Not a normal route of exposure. May cause stomach distress, nausea or vomiting.
Sensitization	Non-hazardous by WHMIS/OSHA criteria.
Chronic effects	Non-hazardous by WHMIS/OSHA criteria.

Carcinogenicity	Non-hazardous by WHMIS/OSHA criteria.	
IARC - Group 3 (Not Classifiable)		
Limonene	5989-27-5	Monograph 73 [1999] (overall evaluation downgraded from 2B to 3 with supporting evidence from other relevant data)
Mutagenicity	Non-hazardous by WHMIS/OSHA criteria.	
Reproductive effects	Non-hazardous by WHMIS/OSHA criteria.	
Teratogenicity	Non-hazardous by WHMIS/OSHA criteria.	
Name of Toxicologically Synergistic Products	Not available	

12. Ecological Information

Ecotoxicity	Components of this product have been identified as having potential environmental concerns.	
Ecotoxicity - Freshwater Fish - Acute Toxicity Data		
Limonene	5989-27-5	96 Hr LC50 Pimephales promelas: 0.619-0.796 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 35 mg/L
Persistence / degradability	Not available	
Bioaccumulation / accumulation	Not available	
Mobility in environmental media	Not available	
Environmental effects	Not available	
Aquatic toxicity	Not available	
Partition coefficient	Not available	
Chemical fate information	Not available	
Other adverse effects	Not available	

13. Disposal Considerations

Disposal instructions	Follow container label directions carefully. Do not reuse towel. Dispose of used towel in trash. Do not flush in toilet. Do not reuse empty container. Wrap container and put in trash collection. Review federal, state/provincial, and local government requirements prior to disposal. Discard with solid waste.
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.	
Canada - WHMIS - Ingredient Disclosure List		
Limonene	5989-27-5	1 %
WHMIS classification	Exempt - Notified cosmetic under the Food & Drugs Act	
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 - No
 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

State regulations None known.

Inventory name

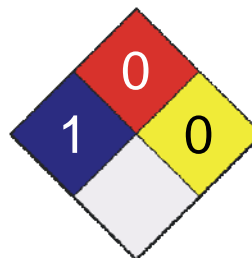
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

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	* 1
Flammability	0
Physical Hazard	0
Personal Protection	



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.

Issue date

27-Sep-2012

Effective date

31-Jul-2011

Expiry date

31-Jul-2014

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.