

Safety Data Sheet

SECTION 1: IDENTIFICATION

1.1 Product Identifier

Product Name: CITADEL Ultra EP Grease #2

Product Grades/Codes: CITADEL Ultra EP Grease #2 – 1823500731 (Drum), 1823500743 (Keg), 1823500751 (Pail), 1823500798 (4x10 Pack)

1.2 Intended Use of the Product

See Technical Data Sheet.

1.3 Company Identification

North American Lubricants Company
7337 E. Doubletree Ranch Road, Suite 180
Scottsdale, AZ 85258
(800)430-6252
www.nalube.com

1.4 Emergency Telephone Number

Emergency Number : CHEMTREC: (800)424-9300 or (703)527-3887

SECTION 2: HAZARDS IDENTIFICATION

2.1 OSHA/HCS Status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

2.2 Classification of the Substance or Mixture:

SERIOUS EYE DAMAGE/EYE IRRITATION – Category 2A

SKIN SENSITIZATION – Category 1

2.3 GHS Label Elements

Symbol:



Signal Word: Warning

Hazard Statements: H319 – Causes serious eye irritation

H317 – May cause an allergic skin reaction

2.4 Precautionary Statements

Prevention: P280 – Wear protective gloves. Wear eye or face protection.

P261 – Avoid breathing dust.

P264 – Wash hands thoroughly after handling.

P272 (OSHA) - Contaminated work clothing must not be allowed out of the workplace.

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Response: P302 + P352 + P363 – IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse.
P333 + P313 – If skin irritation or rash occurs; get medical attention.
P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 – If eye irritation persists: Get medical attention.

Storage: Not applicable

Disposal: P501 – Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards Not Otherwise Classified: None known

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance/Mixture: Mixture

Ingredient Name	%	CAS Number
Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated	≥ 3 - ≤ 5	68037-01-4
Calcium dihydroxide	≥ 1 - ≤ 3	1305-62-0
2-Methylpetane-2,4,4-diol	≥ 1 - ≤ 3	107-41-5
Benzenamine, N-phenyl-, styrenated	≥ 1 - ≤ 3	68442-68-2
Alkylmercaptothiadiazole	≥ 0.3 - ≤ 1	Proprietary

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: FIRST AID MEASURES

4.1 Description of First Aid Measures

Eye Contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention if irritation occurs.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin Contact: Wash with plenty of soap and water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

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4.2 Potential Acute Health Effects

Eye Contact: Causes serious eye irritation.

Inhalation: No known significant effects or critical hazards.

Skin Contact: May cause an allergic skin reaction.

Ingestion: No known significant effects or critical hazards.

4.3 Over-Exposure Signs/Symptoms

Eye Contact: Adverse symptoms may include the following: pain or irritation, watering, redness.

Inhalation: No known significant effects or critical hazards.

Skin Contact: Adverse symptoms may include the following: irritation, redness.

Ingestion: No known significant effects or critical hazards.

4.4 Indication of Immediate Medical Attention and Special treatment Needed, if Necessary

Notes to Physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Special Treatments: No specific treatment.

Protection of First Responders: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing Media

Suitable Extinguishing Media: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable Extinguishing Media: None known.

5.2 Special Hazards Arising from the Substance or Mixture

No specific fire or explosion hazard.

5.3 Hazardous Thermal Decomposition Products

Decomposition products may include the following materials: carbon dioxide, carbon monoxide, metal oxide/oxides.

5.4 Special Protective Actions for Firefighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

5.5 Advice for Firefighters

Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

For Non-Emergency Personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For Emergency Responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental Precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.2 Methods and Material for Containment and Cleaning

Spill: Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Protective measures: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on General Occupation Hygiene: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.

Conditions for Safe Storage, Including Any Incompatibilities: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

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According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

Occupational Exposure Limits:

Ingredient Name	Exposure Limits
Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated	None
Calcium dihydroxide	ACGIH TLV (United States, 3/2017) TWA: 5mg/m ³ 8 hours NIOSH REL (United States, 10/2016) TWA: 5mg/m ³ 10 hours OSHA PEL (United States, 6/2016) TWA: 5mg/m ³ 8 hours. Form: Respirable fraction TWA: 15mg/m ³ 8 hours. Form: Total dust
2-Methylpentane-2, 4-diol	ACGIH TLV (United States, 3/2017) STEL: 10mg/m ³ 15 minutes. Form: inhalable fraction. Aerosol only. STEL: 50 ppm 15 minutes. Form: Vapor fraction TWA: 25 ppm 8 hours. Form: Vapor fraction NIOSH REL (United States, 10/2016) CEIL: 25 ppm CEIL: 125 mg/m ³
Benzenamine, N-phenyl-, styrenated	None
Alkylmercaptothiadiazole	None

Appropriate Engineering Controls: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental Exposure Controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

8.2 Individual Protection Measures

Hygiene Measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/Face Protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dust. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

8.3 Skin Protection

Hand Protection: Chemical resistant, impervious gloves complying with an approved standard should be worn at all times when at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body Protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other Skin Protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

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According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Respiratory Protection: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Appearance

Physical State	: Solid (Semi-Solid Gel)
Color	: Blue
Odor	: Mild Petroleum
Odor Threshold	: Not Available
pH	: Not Available
Melting Point	: Not Available
Boiling Point	: Not Available
Flash Point	: Not Available
Evaporation Rate	: Not Available
Flammability (solid, gas)	: Not Available
Upper/Lower Flammability or Explosive limits	
Lower Explosive Limit	: Not Available
Upper Explosive Limit	: Not Available
Vapor Pressure	: < 0.13 kPa (< 1 mm Hg) [room temperature]
Vapor Density	: Not Available
Relative Density	: Not Available
Solubility	: Not Available
Partition Coefficient: N-Octanol/Water	: Not Available
Auto-Ignition Temperature	: Not Available
Decomposition Temperature	: Not Available
Viscosity	: Not Available
Flow Time (ISO 2431)	: Not Available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical Stability

The product is stable.

10.3 Possibility of Hazardous Reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to Avoid

No specific data.

10.5 Incompatible Materials

Reactive or incompatible with the following materials: oxidizing materials.

10.6 Hazardous Decomposition Products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Acute Toxicity

Product/Ingredient Name	Result	Species	Dose	Exposure
Calcium dihydroxide	LD50 Oral	Rat	7340 mg/kg	-
2-Methylpentane-2, 4-diol	LD50 Oral	Rat	3700 mg/kg	-
Benzenamine, N-phenyl-, styrenated	LD50 Dermal	Rabbit	>10000 mg/kg	-

11.2 Irritation/Corrosion

Product/Ingredient Name	Result	Species	Score	Exposure	Observation
Calcium dihydroxide	Eyes – Severe Irritant	Rabbit	-	10 mg	-
2-Methylpentane-2, 4-diol	Skin – Mild Irritant	Rabbit	-	465 mg	-
	Skin - Moderate Irritant	Rabbit	-	24 hours 500 mg	-

11.3 Specific Target Organ Toxicity (Single Exposure)

Name	Category	Target Organs
Calcium dihydroxide	3	Respiratory tract irritation

Information on the Likely Routes of Exposure:

Dermal contact. Eye contact. Ingestion.

11.4 Potential Acute Health Effects

Eye Contact: Causes serious eye irritation.

Inhalation: No known significant effects or critical hazards.

Skin Contact: May cause an allergic skin reaction.

Ingestion: No known significant effects or critical hazards.

11.5 Symptoms Related to the Physical, Chemical and Toxicological Characteristics

Eye Contact: Adverse symptoms may include the following: pain or irritation, watering and redness.

Inhalation: No known significant effects or critical hazards.

Skin Contact: Adverse symptoms may include the following: irritation and redness.

Ingestion: No known significant effects or critical hazards.

11.6 Delayed and Immediate Effects and Also Chronic Effects from Short and Long Term Exposure

No known significant effects or critical hazards.

11.7 Potential Chronic Health Effects

General: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity: No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity: No known significant effects or critical hazards.

Developmental Effects: No known significant effects or critical hazards.

Fertility Effects: No known significant effects or critical hazards.

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11.8 Numerical Measures of Toxicity

Acute Toxicity Estimates

Route	ATE VALUE
Oral	222811 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Product/Ingredient Name	Result	Species	Exposure
Calcium dihydroxide	Acue LC50 33884.4 µg/L Fresh water	Fish- Clarias gariepinus – Fingerling	96 hours
	Acute EC50 2800000 4 µg/L Fresh water	Crustaceans – Ceriodaphnia reticulata - Larvae	48 hours
2-Methylpentane-2, 4-diol	Acute EC50 3200000 4 µg/L Fresh water	Daphnia – Daphnia magna – Larvae	48 hours
	Acute LC50 8000000 4 µg/L Marine water	Fish – Alburnus alburnus	96 hours

12.2 Persistence and Degradability

There is no data available.

12.3 Bioaccumulative Potential

Product/Ingredient Name	LogP _{ow}	BCF	Potential
Dec-1-ene, homopolymer, Hydrogenated Dec-1-ene, oligomers, hydrogenated	>6.5	-	high
2-Methylpentane-2, 4-diol	0.58	-	low

12.4 Soil/Water Partition Coefficient (K_{oc})

There is no data available.

12.5 Other Adverse Effects

No known significant effects or critical hazards.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Disposal Methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

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According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

SECTION 14: TRANSPORT INFORMATION

14.1 Regulations

	DOT Classification	IMDG	IATA
UN Number	Not Regulated	Not Regulated	Not Regulated
UN Proper Shipping Name	-	-	-
Transport Hazard Class(es)	-	-	-
Packing Group	-	-	-
Environmental Hazards	No.	No.	No.

AERG: Not Applicable

14.2 Special Precautions for User

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

SECTION 15: REGULATORY INFORMATION

15.1 US Federal Regulations:

United States Inventory (TSCA 8b):	All components are listed or exempted.
Clean Water Act (CWA) 307:	Phosphorodithioic acid, mixed O, O-bis(iso-Bu and pentyl) esters, zinc salts
Clean Water Act (CWA) 311:	Sulfuric acid
Clean Air Act Section 112: (b) Hazardous Air Pollutants (HAPS)	Listed
Clean Air Act Section 602: Class I Substances	Not Listed
Clean Air Act Section 602: Class II Substances	Not Listed
DEA List I Chemicals: (Precursor Chemicals)	Not Listed
DEA List II Chemicals: (Essential Chemicals)	Not Listed

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15.2 Saturate, Aromatic, Resin and Asphaltene (SARA)

SARA 302/304 Composition/Information on Ingredients

Name	EHS	SARA 302 TPQ		SARA 304 RQ	
		(lbs)	(gallons)	(lbs)	(gallons)
Sulfuric acid	Yes	1000	66.3	1000	66.3
Sulphur Dioxide	Yes	500	-	500	-

SARA 304 RQ: 2017927.3 lbs / 916139 kg

SARA 311/312 Composition/Information on Ingredients

Classification: SERIOUS EYE DAMAGE / EYE IRRITATION – Category 2A
SKIN SENSITIZATION – Category 1

Name	Classification
Calcium dihydroxide	SKIN CORROSION/IRRITATION – Category 2 SERIOUS EYE DAMAGE / EYE IRRITATION – Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation – Category 3)
2-Methylpentane-2, 4-diol	SKIN CORROSION/IRRITATION – Category 2 SERIOUS EYE DAMAGE / EYE IRRITATION – Category 2A
Alkylmercaptothiadiazole	SKIN CORROSION / IRRITATION – Category 2 SERIOUS EYE DAMAGE / EYE IRRITATION – Category 2A SKIN SENSITIZATION – Category 1

SARA 313 Composition/Information on Ingredients

No Data Available

15.3 State Regulations

Massachusetts: The following components are listed: Distillates (petroleum), hydrotreated heavy paraffinic; Distillates (petroleum), solvent-dewaxed heavy paraffinic; Distillates (petroleum), hydrotreated light paraffinic; Distillates (petroleum), solvent-dewaxed light paraffinic; Limestone; 2-Methylpentane-2, 4-diol; Calcium dihydroxide.

New York: None of the components are listed.

New Jersey: The following components are listed: Limestone; 2-Methylpentane-2, 4-diol; Calcium dihydroxide.

Pennsylvania: The following components are listed: Limestone; 2-Methylpentane-2, 4-diol; Calcium dihydroxide.

California Prop. 65: WARNING: This product can expose you to chemicals including 4-Methylpentan-2-one, which is known to the State of California to cause cancer and birth defects or other reproductive harm. This product can expose you to chemicals including Strong inorganic acid mists containing sulfuric acid, Crystalline silica, respirable powder, which are known to the State of California to cause cancer, and Sulphur Dioxide, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

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SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION**Procedure Used to Derive the Classification**

Classification	Justification
SERIOUS EYE DAMAGE / EYE IRRITATION – Category 2A	Calculation method
SKIN SENSITIZATION – Category 1	Calculation method

Revision Date : 2/06/2020**Other Information** : This information has been compiled from sources considered to be dependable and is accurate to the best our North American Lubricants Company's knowledge.**GHS Full Text Phrases:**

H319	Causes serious eye irritation
H317	May cause an allergic skin reaction

Party Responsible for the Preparation of This Document

North American Lubricants Company
7337 E. Doubletree Ranch Road, Suite 180
Scottsdale, AZ 85258
(800)430-6252
www.nalube.com

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. North American Lubricants Company assumes no responsibility for injury from the use of the product described herein.

North America GHS US 2012 & WHMIS 2