

MATERIAL SAFETY DATA SHEET

SECTION 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

Product Name:	Rheotec CA ₂ Calcium NLGI-2
Product Type:	Liquid

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Use of the Substance / Mixture:	Grease
	For specific application advice see appropriate Technical Data Sheet or
	consult our company representative.

1.3 Details of the Supplier of the Safety Data Sheet

Supplier:	Phoenix Grease & Lubricants Manufacturing LLC, Plot No. 599 - 1052, Jebel Ali Industrial First, Dubai, United Arab Emirates
Supplier Phone & Email Address:	Phone: +9716 5522454 Email: info@phoenixlubricants.com
Date of Issue	15-April-2022
Date of Revision	05-May-2022
Prepared by:	Phoenix Grease & Lubricants Manufacturing LLC

1.4 Emergency Telephone Number

Emergency Telephone Number:	United Arab Emirates, Government of Sharjah, Hamriyah Free Zone
	Authority, SAFETY PH NO. +971 6 5618895 (24x7)
	EMERGENCY PH NO. +971 6 5618895 (24x7)

SECTION 2: Hazard Identification

2.1 Classification of the Substance / Mixture

Product Definition:

Mixture



Classification according to Regulation Not Classified (EC) No. 1272/2008 [CLP/GHS]

Classification according to Directive 1999/45/EC [DPD]	The product is not classified as dangerous according to Directive 1999/45/EC and its amendments.
	See sections 11 and 12 for more detailed information on health effects and symptoms and environmental hazards.

2.2 Label Elements

Signal Word:	No signal word.
Hazard Statements:	No known significant effects or critical hazards.
Precautionary Statements:	
Prevention	Not applicable.
Response	Not applicable.
Storage	Not applicable.
Disposal	Not applicable.
Supplemental Label Elements:	Not applicable.
Special Packaging Requirements:	
Containers to be fitted	Not applicable.
with child-resistant	
fastenings	
Tactile Warning of Danger:	Not applicable.

2.3 Other Hazards

Other Hazards which do not Result in	Defatting to the skin.
Classification:	USED Grease
	Used engine oil may contain hazardous components, which have the
	potential to cause skin cancer.
	See Toxicological Information, section 11 of this Safety Data Sheet.

SECTION 3: Composition/Information on Ingredients

Substance / Mixture:

Mixture

Highly refined base oil (IP 346 DMSO extract < 3%). Chemically modified base oil and Proprietary performance additives.



This product does not contain any hazardous ingredients at or above regulated thresholds.

SECTION 4: First Aid Measures

4.1 Description of First Aid Measures

Eye Contact: Eye Contact:	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention.
Skin Contact:	Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if irritation develops.
Ingestion:	Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if Symptoms occur.
Inhalation:	If inhaled, remove to fresh air. Get medical attention if symptoms appear. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Protection of First Aiders:	No action shall be taken involving any personal risk or without suitable training.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

See Section 11 for more detailed information on health effects and symptoms.

4.3 Indication of Immediate Medical Attention and Special Treatment Needed



Notes to Physician:	See Section 11 for more

See Section 11 for more detailed information on health effects and symptoms.

SECTION 5: Fire Fighting Measures

5.1 Extinguishing Media

Suitable Extinguishing Media	In case of fire, use foam, dry chemical or carbon dioxide extinguisher or
	spray.

Unsuitable Extinguishing Media Do not use water jet.

5.2 Special Hazards Arising from Substance / Mixture

Hazards from the Substance or Mixture	ure In a fire or if heated, a pressure increase will occur and the container ma burst.	
Hazardous Combustion Products	Combustion products may include the following: Carbon Oxides (CO,	

CO₂) (carbon monoxide, carbon dioxide)

5.3 Advice for Fire Fighters

Special precautions for fire-fighters	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.
Special protective equipment for fire-fighters	Fire fighters should wear appropriate protective equipment and self- contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

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 spilt material.



Floors may be slippery; use care to avoid falling. Put on appropriate personal protective equipment.

For emergency respondersIf 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 nonemergency personnel".

6.2 Environmental Precautions

Avoid dispersal of spilt 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).

6.3 Methods and Material for Containment and Cleaning Up

Small Spill	Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large Spill	Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, watercourses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.

6.4 Reference to Other Sections

See Section 1 for emergency contact information. See Section 5 for firefighting measures. See Section 8 for information on appropriate personal protective equipment. See Section 12 for environmental precautions. See Section 13 for additional waste treatment information.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment.

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Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for Safe Storage, Including Any Incompatibilities

Store in accordance with local regulations. Store in a dry, cool and wellventilated area, away from incompatible materials (see Section 10). Keep away from heat and direct sunlight. 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. Store and use only in equipment/containers designed for use with this product. Do not store in unlabeled containers.

7.3 Specific and End Use(s) Recommendations

See section 1.2 and Exposure scenarios in annex, if applicable.

SECTION 8: Exposure Controls / Personal Protection

8.1 Control Parameters

Occupational Exposure Limits	No exposure limit value known measures.
	Whilst specific OELs for certain components may be shown in this section, other components may be present in any mist, vapor or dust produced. Therefore, the specific OELs may not be applicable to the product as a whole and are provided for guidance only.
Recommended Monitoring Procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit

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values and measurement strategy) European Standard EN14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Derived No Effect Level	No DNELs/DMELs available

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Predicted No Effect Concentration No PNECs available.

8.2 Exposure Controls

Appropriate Engineering Controls	Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits. All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained. Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organization for standards. The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.
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. Ensure that eyewash stations and safety showers are close to the workstation location.
Respiratory Measures	Respiratory protective equipment is not normally required where there is adequate natural or local exhaust ventilation to control exposure. In case of insufficient ventilation, wear suitable respiratory equipment. The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full

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assessment of the working conditions.

Eye / Self Protection

Skin Protection Hand Protection Safety glasses with side shades

General Information:

Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. The correct choice of protective gloves depends upon the chemicals being handled, and the conditions of work and use. Most gloves provide protection for only a limited time before they must be discarded and replaced (even the best chemically resistant gloves will break down after repeated chemical exposures). Gloves should be chosen in consultation with the supplier / manufacturer and taking account of a full assessment of the working conditions.

Recommended: Nitrile Gloves

Breakthrough time:

Breakthrough time data are generated by glove manufacturers under laboratory test conditions and represent how long a glove can be expected to provide effective permeation resistance. It is important when following breakthrough time recommendations that actual workplace conditions are taken into account. Always consult with your glove supplier for up-to-date technical information on breakthrough times for the recommended glove type. Our recommendations on the selection of gloves are as follows:

Continuous contact:

Gloves with a minimum breakthrough time of 240 minutes, or >480 minutes if suitable gloves can be obtained. If suitable gloves are not available to offer that level of protection, gloves with shorter breakthrough times may be acceptable as long as appropriate glove maintenance and replacement regimes must be determined and rigorously followed.

Note: Depending on the activity being conducted, gloves of varying thickness may be required for specific tasks.

For Example:

• Thinner gloves (down to 0.1 mm or less) may be required where a high degree of manual dexterity is needed. However, these gloves are only likely



	to give short duration protection and would normally be just for single use applications, then disposed of.
	• Thicker gloves (up to 3 mm or more) may be required where there is a mechanical (as well as a chemical) risk i.e. where there is abrasion or puncture potential.
Skin and Body:	Use of protective clothing is good industrial practice. 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. Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required.
Refer to Standards	Respiratory protection: EN529 Gloves: EN420, EN374 Eye protection: EN166
Environmental Exposure Controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Appearance	
Physical State	Gel
Color	Not Available
Odour	Not Available
Odour threshold	Not Available
Worked Penetration	265 - 295
Melting point/freezing point	Not Available
Dropping point	90 °c
Pour point	Not Available



Flash point	Not Available
Evaporation rate	Not Available
Flammability (solid, gas)	Not Available
Upper/lower flammability or	Not Available
explosive limits	
Vapor pressure	Not Available
Vapor density	Not Available
Relative density	Not Available
SP. Gravity @15°C/ 60°F	Not Available
Solubility	Insoluble in wa
Partition coefficient:	Not Available
Auto-ignition temperature	Not Available
Decomposition temperature	Not Available
Viscosity	Not Available
Explosive properties	Not Available
Oxidizing properties	Not Available

Not Available Not Available Not Available Not Available Not Available Not Available Insoluble in water. Not Available Not Available Not Available Not Available Not Available Not Available

9.2 Other Information

No Additional Information

SECTION 10: Stability and Reactivity

10.1 Reactivity

No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.

10.2 Chemical Stability

This product is stable.

10.3 Possibility of Hazardous Reactions

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

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

10.4 Conditions to Avoid



Avoid all possible sources of ignition (spark or flame).

10.5 Incompatible Materials

Reactive or incompatible with Oxidizing Materials

10.6 Hazardous Decomposition Products

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

SECTION 11: Toxicological Information

11.2 Information on Toxicological Effects

Acute Toxicity Estimates Petroleum derived calcium salt 61789-86-4	Route Oral Dermal Inhalation (dusts and mists)	ATE Value > 5000mg/kg > 4000 mg/kg 418.6 mg/l
Information on the likely routes of exposure	Routes of entry anticipated: Derma	l, Inhalation.
Potential Acute Health Effects Inhalation	Exposure to decomposition produce effects may be delayed following ex	ts may cause a health hazard. Serious xposure.
Ingestion	No known significant effects or crit	ical hazards.
Skin Contact	Defatting to the skin. May cause sk	in dryness and irritation.
Eye Contact	No known significant effects or crit	ical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation	No specific data	
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Ingestion	No specific data
Skin Contact	Adverse symptoms may include irritation, dryness, cracking
Eye Contact	No specific data

Delayed and immediate effects and also chronic effects from short and long term exposure	Over exposure to the inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract.
Inhalation/Ingestion Skin Contact	Ingestion of large quantities may cause nausea and diarrhea. Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis.
Potential Chronic Health Effects	Potential risk of transient stinging or redness if accidental eye contact occurs.
General	Used Engine Oils : Combustion products resulting from the operation of internal combustion engines contaminate engine oils during use. Used engine oil may contain hazardous components, which have the potential to cause skin cancer. Frequent or prolonged contact with all types and makes of used engine oil must therefore be avoided and a high standard of personal hygiene maintained.
Carcinogenicity	No know significant effects or critical hazards.
Mutagenicity	No know significant effects or critical hazards.
Developmental Effects	No know significant effects or critical hazards.
Fertility Effects	No know significant effects or critical hazards.



SECTION 12: Ecological Inforn	nation
12.1 Toxicity	
Environmental Hazard	Not classified as dangerous.
12.2 Persistence and Degradabili	ty
	Partially biodegradable.
12.3 Bio Accumulative Potential	
	This product is not expected to bio accumulate through food chains in the environment.
12.4 Mobility in Soil	
Soil / Water partition coefficient (KOC)	Not available
Mobility	Spillages may penetrate the soil causing ground water contamination
12.5 Result of PBT and vPVB Ass	essment
РВТ	Not applicable
vPVB	Not applicable
12.6 Other Adverse Effects	
Other ecological information	Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.
SECTION 13: Disposal Conside	erations
13.1 Waste Treatment Methods	

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Methods of Disposal Where possible, arrange for product to be recycled. Dispose of via an



authorized person/ licensed waste disposal contractor in accordance with local regulations.

	•	Waste Designation Other engine, gear, and lubricating oils ided use and/or the presence of an e an alternative waste disposal code
Packing		
Methods of Disposal		ict to be recycled. Dispose of via an disposal contractor in accordance with
Special Precautions	containers or liners may retain som	t be disposed of in a safe way. Empty e product residues. Avoid dispersal of act with soil, waterways, drains and

SECTION 14: Transport Information

	ADR/RID	ADN	IMDG	ΙΑΤΑ
14.1 UN Number	Not regulated	Not regulated	Not regulated	Not regulated
14.2 UN Proper Shipping Name	-	-	-	-
14.3 Transport Hazard Class	-	-	-	-
14.4 Packing Group	-	-	-	-
14.5 Environmental Hazards	NO	No	No	No
Additional Information	-	-	-	-
14.6 Special Precautions for User	Not available			

SECTION 15: Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture



EU Regulation (EC) No. 1907/2006 (REACH) Annex XIV - List of substances subject to authorization

None of the components are listed

Not applicable

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Substances of very high concern Annex XVII - Restrictions on the manufacturer, placing on the market and use of certain dangerous substances mixtures and articles.

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Other Regulations	The company, as identified in Section 1, sells this
REACH Status	product in the EU in compliance with the
	current requirements of REACH.
United States Inventory (TSCA 8b)	All components are listed or exempted.
Australia Inventory (AICS)	At least one component is not listed.
Canada Inventory	At least one component is not listed.
China Inventory (IECSC)	At least one component is not listed.
Japan Inventory (ENCS)	At least one component is not listed.
Korea Inventory (KECI)	At least one component is not listed.
Philippines Inventory (PICCS)	At least one component is not listed.

15.2 Chemical Safety Assessment

This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other Information

Abbreviations and Acronyms	 ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road ATE = Acute Toxicity Estimate BCF = Bio Concentration Factor CAS = Chemical Abstracts Service CLP = Classification, Labeling and Packaging Regulation [Regulation (EC) No. 1272/2008] CSA = Chemical Safety Assessment CSR = Chemical Safety Report DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level DPD = Dangerous Substances Directive [1999/45/EC] EINECS = European Inventory of Existing Commercial chemical Substances ES = Exposure Scenario EUH statement = CLP-specific Hazard statement EWC = European Waste Catalogue GHS = Globally Harmonized System of Classification and Labeling of Chemicals
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	IBC = Intermediate IMDG = Internation LogPow = logarith MARPOL 73/78 = Ir Protocol of 1978. (" OECD = Organizati PBT = Persistent, B PNEC = Predicted N RID = The Regulatio RRN = REACH Regi SADT = Self-Accele SVHC = Substances STOT-RE = Specific STOT-SE = Specific TWA = Time weigh UN = United Nation UVCB = Complex h VOC = Volatile Org	onal Maritime Dangerous Goods thm of the octanol/water partition coefficient International Convention for the Prevention of Pollution From Ships, 1973 as modified by the ("Marpol" = marine pollution) ation for Economic Co-operation and Development , Bio Accumulative and Toxic d No Effect Concentration ations concerning the International Carriage of Dangerous Goods by Rail egistration Number elerating Decomposition Temperature ces of Very High Concern ific Target Organ Toxicity - Repeated Exposure fic Target Organ Toxicity - Single Exposure ghted average ions hydrocarbon substance		
Full text of abbreviated H statements		Н 304	May be fatal if swallowed and enters airways.	
Full text of classifications [CLP/GHS]		H 413 Aquatic Chronic 4, H413 Asp. Tox. 1, H304	May cause long lasting harmful effects to aquatic life. LONG-TERM AQUATIC HAZARD - Category 4 ASPIRATION HAZARD - Category 1	
Full text of abbreviated	R Phrases	R53- May cause long-term ad	lverse effects in the aquatic environment.	
Full text of classifications [DSD/DPD]		Not Applicable		
History Date of Issue Date of Revision Prepared by		15/04/2022 05/05/2022 Petroleum Technology FZC		

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