SAFETY DATA SHEET

RO 30

Section 1. Identification

GHS product identifier : RO 30

Product code : 3180-00-E

Chemical name : Distillates (petroleum), clay-treated heavy naphthenic

Other means of identification : Baseoil - unspecified; Distillates, petroleum, clay treated heavy naphthenic; Petroleum distillates, clay-treated heavy naphthenic; Distillates (petroleum), clay treated heavy naphthenic; Base oil — unspecified

Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Identified uses
Petrochemical industry: Petroleum refining. Naphthenic Lubricant.

Uses advised against	Reason
Not available.	

Supplier's details : Calumet Specialty Products Partners, L.P.
2780 Waterfront Pkwy E. Dr.
Suite 200
Indianapolis, Indiana 46214 USA
Technical Services: 317-328-5660

Emergency telephone number (with hours of operation) : 24 hr. CHEMTREC 1-800-424-9300 / International 1-703-527-3887

Section 2. Hazards identification

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture : Not classified.

GHS 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.

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Substance

Chemical name : Distillates (petroleum), clay-treated heavy naphthenic

Other means of identification : Baseoil - unspecified; Distillates, petroleum, clay treated heavy naphthenic; Petroleum distillates, clay-treated heavy naphthenic; Distillates (petroleum), clay treated heavy naphthenic; Base oil — unspecified

CAS number/other identifiers

CAS number : 64742-44-5

Ingredient name	%	CAS number
Distillates (petroleum), clay-treated heavy naphthenic	100	64742-44-5

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

Description of necessary 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. Get medical attention if irritation occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Ingestion : Wash out mouth with water. 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. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

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.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

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

Unsuitable extinguishing media : Do not use water jet.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

Special protective actions 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.

Section 6. Accidental release measures

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. Put on appropriate personal protective equipment.

For emergency responders : If specialised 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).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry 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, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. 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 (see Section 13). 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

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational 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. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Section 7. Handling and storage

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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Distillates (petroleum), clay-treated heavy naphthenic	**ACGIH TLV (United States, 4/2014).** TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction **NIOSH REL (United States, 10/2013).** TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist **OSHA PEL (United States, 2/2013).** TWA: 5 mg/m³ 8 hours.

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. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

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 dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

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.

Respiratory protection : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid. [Viscous liquid.]

Color : Clear. Colorless to light yellow.

Odor : Hydrocarbon.

Odor threshold : Not available.

pH : Not available.

Melting point : 0°C (32°F)

Boiling point : 207 to 750°C (404.6 to 1382°F)

Flash point : Closed cup: 98 to 344°C (208.4 to 651.2°F)
Open cup: 185°C (365°F) [Cleveland.]

Evaporation rate : <0.04 (butyl acetate = 1)

Flammability (solid, gas) : Not available.

Lower and upper explosive (flammable) limits : Not available.

Vapor pressure : <0.011 kPa (<0.08 mm Hg) [room temperature]

Vapor density : Not available.

Relative density : 0.916

Solubility : Insoluble in the following materials: cold water and hot water.

Partition coefficient: n-octanol/water : 2 to 6

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Kinematic (40°C (104°F)): 0.6143 cm^2/s (61.43 cSt)

Section 10. Stability and reactivity

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

Chemical stability : The product is stable.

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

Conditions to avoid : No specific data.

Incompatible materials : No specific data.

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

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Distillates (petroleum), clay-treated heavy naphthenic	LC50 Inhalation Dusts and mists	Rat	>5.53 mg/l	4 hours
	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-

Irritation/Corrosion

Not available.

Sensitization

Section 11. Toxicological information

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Conclusion/Summary : The classification as a carcinogen need not apply as it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Section 11. Toxicological information

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Distillates (petroleum), clay-treated heavy naphthenic	Acute EC50 >100 mg/l	Algae	72 hours
	Acute EC50 >100 mg/l	Daphnia	48 hours
	Acute LC50 >100 mg/l	Fish	96 hours
	Chronic NOEL >1 mg/l	Daphnia	21 days

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Distillates (petroleum), clay-treated heavy naphthenic	-	-	Inherent

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Distillates (petroleum), clay-treated heavy naphthenic	2 to 6	-	high

Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times 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.

RCRA classification : Not regulated.

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.

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.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 8(a) CDR Exempt/Partial exemption**: This material is listed or exempted.
This material is listed or exempted.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not 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

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Not applicable.

Composition/information on ingredients

No products were found.

State regulations

Massachusetts : This material is not listed.

New York : This material is not listed.

New Jersey : This material is listed.

Pennsylvania : This material is not listed.

California Prop. 65

This product is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International lists

National inventory

Australia : This material is listed or exempted.

Canada : This material is listed or exempted.

China : This material is listed or exempted.

Europe : This material is listed or exempted.

Section 15. Regulatory information

Japan : This material is listed or exempted.

Malaysia : Not determined.

New Zealand : This material is listed or exempted.

Philippines : This material is listed or exempted.

Republic of Korea : This material is listed or exempted.

Taiwan : This material is listed or exempted.

Section 16. Other information

Procedure used to derive the classification

Classification	Justification
Not classified.	

History

Date of issue/Date of revision : 06/02/2015

Version : 1.01

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Nu-Calgon Wholesaler, Inc.

MATERIAL SAFETY DATA SHEET

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Company Name	Phone Number		CHEMTREC	
Nu-Calgon Wholesaler, Inc.	(314) 469-7000 / (800) 554-5499		(800) 424-9300	
Street Address	**City**	**State**	**Postal Code**	**Last Update**
2008 Altom Court	St. Louis	MO	63146-4151	11/9/06
Product Name	**Product Number**	**Product Use**		**EPA Registration #**
C-4 Refrigeration Oil	4304	Refined and Treated Naphthenic Oils		N/A

SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients	% By Wt.	CAS Number	TLV	PEL
Heavy Naphthenic Clay Treated Distillates (petroleum)	100.0 %	64742-44-5	5 mg/m3	5 mg/m3

SECTION 3 – HAZARD IDENTIFICATION

Emergency Overview: This product is a clear, pale-straw to water-white, viscous liquid. It has a light petroleum odor. This product is slightly combustible (Flammability Class IIIB) but will burn. The flash point is >201°F and autoiguition temperature is 650°F. Heated produet will produce colorless vapors. Heated vapors in the presence of an ignition source can be explosive if confined. When burned, the product will produce carbon monoxide and other asphyxiants during combustion.

Potential Health Effects

Eyes: Material splashed in eyes will irritate tissues. Gently flush material from eyes with clean water.

Skin: Prolong unprotected exposure to this product will cause skin irritation.

Ingestion: No Data.

Inhalation: No Data.

Chronic Exposure: No Data.

Carcinogenicity: This product does not require a cancer hazard warning in accordance with the OSHA Hazard Communication Standard.

Medical Conditions Aggravated bc Exposure: Personnel with pre-existing skin disorders should avoid contact with this product. Health studies have shown that many petroleum hydrocarbons and synthetic lubricants pose potential human health risks whieh may vary from person to person. As a precaution, exposure to liquids, vapors, mists or fumes should be minimized.

SECTION 4 – FIRST AID MEASURES

Eyes: If splashed into eyes, flush with elear water for 15 minutes or until irritation subsides. If irritation persists, call a physician.

Skin: In case of skin contact, remove any contaminated elothing and wash skin with soap and water. Launder or dry-clean clothing before reuse. If product is injected into or under thc skin, or into any part of the body, regardless of the appearanee of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury. Prolonged or repeated skin contact may cause skin irritation.

Ingestion: Product is practically non-toxie. Do not induce vomiting. Obtain emergency medical attention.

Inhalation: Vapor pressure is very low. Vapor inhalation under ambient conditions is normally not a problem. If overcome by vapor from hot product, immediately remove from exposure and call a physician. If breathing is irregular or has stopped, start resuseitation; administer oxygen, if availablc. If overexposed to oil mist, remove from exposure until excessive oil mist condition subsides.

SECTION 5 – FIREFIGHTING MEASURES

Flash Point: 350°F

Autoignition Temp: 343°C/650°F

Hazardous Products of Combustion: Fumes, smoke, earbon monoxide, aldehydes and other decomposition products, in the ease of incomplete combustion.

Flammable Limits in Air: No Data.

Extinguishing Media: Foam, water spray (fog), dry chemical, carbon dioxide, and vaporizing liquid type extinguishing agents mat all be suitable for extinguishing fires involving this type of product, depending on size or potential size of fire and eireumstanees related to the situation.

Fire and Explosion Hazards: Slightly combustible. OSHA/NFPA Class IIIB Combustible Liquid. If heated above its flash point will release flammable vapors which can burn in the open or be explosive in confined spaces if exposed to ignition source. Mists or sprays may be flammable below oils normal flash point. Keep away from extreme heat or open flame.

Special Firefighting Procedures: Plan fire proteetion and response strategy through consultation with local fire protection authorities or appropriate specialists. The following procedures for this type of product are based on the recommendations in the National Fire Protection Association's "Fire Protection Guide on Hazardous Materials", Tenth Edition (1991): Use water spray, dry chemical, foam or carbon dioxide to extinguish the fire. Use water to keep fire-exposed containers eool. If a leak or spill has not ignited, use water spray to disperse the vapors and to provide protection for persons attempting to stop a leak. Water spray may be used to flush spills away from exposures. Minimize breathing of gases, vapor, fumes or deeomposition produets. Use supplied-air breathing equipment for enclosed or eonfined spaces or as otherwise needed.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spill or Leak: Extinguish any open flames and remove heat sources. This material will float on water and will be transported by stormwater runoff. Spills to the ground should be immobilized and removed immediately. Spills to watercourses sueh as stormdrains, sewers, ditches, streams, ponds, etc. must be contained with dikes, dams, floating booms, pads, cte. as appropriate. Remove trapped product immediately. Spills that enter a waterbody must be immediately reported to the USEPA's National Response Center at (800)546-2972. Check with your local and state regulators regarding their reporting requirements. Cleanup personnel should wear appropriate personnel proteetive equipment including impervious clothing, rubber boots, gloves, and splash goggles.

SECTION 7 – HANDLING AND STORAGE

Handling Procedures and Equipment: Keep away from flames, sparks or hot surfaces. Never use a torch to eut or weld on or near container. Empty oil containers can contain explosive vapors. Wash hands with soap and water before eating, drinking, smoking or use of toilet faeilities. Do not use gasoline, solvents, kerosene, or harsh abrasive skin eleaners for washing exposed skin areas. Take a shower after work if general contact occurs. Remove oil-soaked clothing and launder before rense. Lannder or diseard eontaminated shoes and leather gloves.

Storage Requiremeuts: NFPA Class IIIB storage. "Empty" containers retain residue (liquid and/or vapor) and cao be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Do not attempt to refill or clean containers since residue is difficult to remove. "Empty" drums should be eompletely drained, properly bunged and promptly returned to a drum reconditioner. All other containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations. For work on tanks refer to Occupational Safety and Health Administration regulations, ANSI Z49.1, and other governmental and industrial referenees pertaining to cleaning, repairing, welding, or other contemplated operations.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection: Normally not required if adequate ventilation. If oecupational exposure limits are exceeded, wear NIOSH/MSHA approved apparatus.

Eye Protection: Use safety glasses or splash goggles when eye contact may occur. Have suitable eyewash water available.

Protective Clothing: Avoid prolonged and/or repeated skin contact. If prolonged eontact eannot be avoided, wear proteetive impervious clothing. Acceptable materials for gloves are polyvinyl chloride, neoprene, nitrile, polyvinyl alcohol, and viton.

Exposure Guidelines: If there is a likelihood of splashing, an oil resistant clothing should be worn. Never wear oil soaked clothing. Launder or dry clean before wearing. Discard oil soaked shoes. Affix warning labels on containers in accordance with 29 CFR 1910.1200 (Hazard Communication Standard). Heavy Naphthenic Clay Treated Distillates (petroleum) 100.0% / CAS NUMBER: 64742-44-5 / Exposure Limits: OIL MIST / OSHA PEL MIST 5 MG/M3 8 HRS / ACGIH TLV MIST 5 MG/M3 8 HRS

Specific Eugineering Controls (such as ventilation, enclosed process): Normally not required if adequate ventilation. If occupational exposure limits are exceeded, wear NIOSH/MSHA approved apparatus.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: Liquid	**Freezing Point:** No Data.°C/No Data.°F	**% Volatile by Weight:** nil%
Color: Clear pale straw	**Vapor Density [air =1]:** >5	**Evaporation Rate:** No Data.
Odor: Light bland petroleum	**Vapor Pressure:** <0.001 mm Hg @ 20°C	**Specific Gravity:** 0.9129 Water = 1
Boiling Point: >260°C/>500°F	**Solubility in Water:** negligible	**pH (concentrate):** No Data.

SECTION 10 – STABILITY AND REACTIVITY

Chemical Stability: Stable. Will not react violently with water.
Hazardous Polymerization: will not occur.
Incompatibilities: Strong oxidizers such as liquid chlorine, concentrated oxygen, sodium hypochlorite, calcium hypochlorite, etc., as this presents a serious explosion hazard.
Reactive Conditions to avoid: Sources of ignition.
Decomposition Products: Combustion may produce carbon monoxide and other asphyxiants.

SECTION 11 – TOXICOLOGICAL INFORMATION

Hazardous Ingredients	CAS #	EINECS #	LD 50 of Ingredient (Specify Species)	LC50 of Ingredient (Specify Species)
Product has a low order of acute and dermal toxicity, but minute amounts aspirated into the lungs during ingestion or vomiting may cause mild to severe pulmonary injury and possibly death.	No Data.	No Data.	No Data.	No Data.
Prolonged or repeated skin contact with this product tends to remove skin oils, possibly leading to irritation and dermatitis; however, based on human experience and available toxicological data, this product is judged to be neither a "corrosive" nor an "irritant" by OSHA criteria.				
In accordance with the current OSHA Hazard Communication Standard criteria, this product does not require a cancer hazard warning. This is because the product is formulated from base stocks which are severely hydrotreated, severely solvent extracted, and/or processed by mild hydrotreatment and extraction. Alternatively, it may consist of components not otherwise affected by IARC criteria, such as atmospheric				
distillates or synthetically derived materials, and as such is not characterized by current IARC classification criteria.				

SECTION 12 – ECOLOGICAL INFORMATION

Hazardous Ingredients	Aquatic Toxicity Data
	If applied to leaves, this product may kill grasses and small plants by interfering with transpiration and respiration. This product is not toxic to fish but may coat gill structures resulting in suffocation if spilled in
	shallow, running water. Product may be moderately toxic to amphibians by preventing dermal respiration. This product may cause gastrointestinal distress to birds and mammals through ingestion during pelage grooming.
	This product is rapidly biodegradable. Biodegradation is possible within 90 to 120 days in aerobic environments at temperatures above 70°F (21°C).

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste Disposal: Product, as supplied, does not meet the characteristics of a hazardous waste as defined in 40 CFR 261.21-24. If mixed with other products, waste mixture must be characterized. DO NOT dispose of this product in drains or storm sewers. DO NOT dispose of this product in a landfill without prior solidification. Waste product should be recycled. Consider waste brokering.

SECTION 14 – TRANSPORTATION INFORMATION

Special Shipping Information:

Purview	Proper Shipping Name	UN Number	Packing Group	Hazard Class
DOT (Land)	Not regulated by DOT.	No Data.	No Data.	No Data.
IMO (Water)	No Data.	No Data.	No Data.	No Data.
ICAO (Air)	No Data.	No Data.	No Data.	No Data.

SECTION 15 – REGULATORY INFORMATION

WHMIS Classification: (Workplace Hazardous Material Information System)	NOT CONTROLLED
SARA Title III: (Superfund Amendments & Reauthorization Act)	SARA 311 Categories: Immediate (Acute) Health Effects --N Delayed (Chronic) Health Effects --Y Fire Hazard --N Sudden Release of Pressure --N Reactivity Hazard --N SECTION 313 SUPPLIER NOTIFICATION No chemicals in this product exceed the De Minimus reporting level established by SARA Title III, Seetion 313 and 40 CFR 372.
OSHA: (Occupational Safety & Health Administration)	No Data.
TSCA: (Toxic Substance Control Act)	The components of this product are listed on the EPA/TSCA inventory of ehemieals.
VOC: (volatile Organic Compounds)	No Data.
CPR: (Canadian Controlled Products Regulations)	This product has been classified in accordance with the hazard eriteria of the Controlled Products Regulations.
EINECS: (European Inventory of Existing Commercial Chemical Substances)	This product is listed on the European Inventory of Existing Commercial Substances under EINECS No. 265-146-1. This Produet has an IP 346 value of <3%. This product is not required to be labeled aecording to the European Directive 67/548/EEC.
DSL / NDSL: (Canadian Domestic Substance List)(Non-Domestic Substance List)	This product is listed on the Canadian (DSL) Domestic Substances List.
CERCLA: (Comprehensive Response Compensation & Liability Act)	No chemieals in this product arc subject to the reporting requirements of CERCLA.
IDL: (Canadian Ingredient Disclosure List)	No Data.
NFPA (HMIS) Rating: (Hazardous Materials Identification Systcm)	Health: 0 Fire: 1 Reactivity: 0

SECTION 16 – OTHER INFORMATION

VISCOSITY: 314.1 SUS @ 100°F / MELTING POINT: -30°F -34°C(D97) / Density lbs/Gal. 7.68

The information contained herein is based on the data available to us and is believed to be correet. However, Nu-Calgon Wholesaler Inc. makes no warranty, expressed, or implied, regarding the aeeuracy 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 herin.