SAFETY DATA SHEET

CALUMET REFINING, LLC

Calsol 804

Section 1. Identification

GHS product identifier

: Calsol 804

Product code

: 300196100000

Chemical name

: Distillates (petroleum), hydrotreated light naphthenic

Other means of identification

: Base oil - unspecified; Distillates, petroleum, hydrotreated light naphthenic; Hydrotreated light naphthenic distillate, solvent extract, petroleum; Mineral oil, petroleum distillates, hydrotreated light naphthenic; Mineral oil, petroleum distillates, hydrotreated (severe) light naphthenic; Hydrotreated light naphthenic distillate

(petroleum); Distillates (petroleum), hydro-treated light naphthenic; Hydrotreated light naphthenic distillate solvent extract (petroleum); Hydrotreated light naphthenic distillate;

Hydrotreated light naphthenic (petroleum); Hydraulic petroleum oil

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

Supplier's details

: Calumet Refining, LLC

2780 Waterfront Pkwy E. Drive Suite 200

Indianapolis, IN 46214

USA

Technical Services: 317-328-5660

Distributed By: R.E. Carroll, Inc. 1570 North Olden Avenue Ext. Ewing, N.J. 08638-3204 USA 609-695-6211/800-257-9365 Orders@RECarroll.com

24hr. CHEMTREC 1-800-424-9300 /

International 1-703-527-3887

: 24 hr. CHEMTREC 1-800-424-9300 / International 1-703-527-3887

Section 2. Hazards identification

OSHA/HCS status

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

Classification of the substance or mixture

: ASPIRATION HAZARD - Category 1

GHS label elements

Hazard pictograms



Signal word

: Danger

Hazard statements

May be fatal if swallowed and enters airways.

Precautionary statements

Prevention

: Not applicable.

Response

: IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce

vomiting.

Storage

: Store locked up.

Disposal

: Dispose of contents and container in accordance with all local, regional, national and

international regulations.

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Section 2. Hazards identification

Hazards not otherwise classified

: None known.

Section 3. Composition/information on ingredients

Substance/mixture

Chemical name

Other means of identification

: Mixture

- : Distillates (petroleum), hydrotreated light naphthenic
- : Baseoil unspecified; Distillates, petroleum, hydrotreated light naphthenic; Hydrotreated light naphthenic distillate, solvent extract, petroleum; Mineral oil, petroleum distillates, hydrotreated light naphthenic; Mineral oil, petroleum distillates, hydrotreated (severe) light naphthenic; Hydrotreated light naphthenic distillate (petroleum); Distillates (petroleum), hydro-treated light naphthenic; Hydrotreated light naphthenic distillate; Hydrotreated light naphthenic (petroleum); Hydrotreated light naphthenic distillate; Hydrotreated light naphthenic (petroleum); Hydraulic petroleum oil

Ingredient name	%	CAS number
Distillates (petroleum), hydrotreated light naphthenic	≥90	64742-53-6

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. Continue to rinse for at least 10 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 aid to give 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

: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

: Get medical attention immediately. Call a poison center or physician. 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. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. 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.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact
 Inhalation
 No known significant effects or critical hazards.
 Skin contact
 No known significant effects or critical hazards.
 Ingestion
 May be fatal if swallowed and enters airways.

Over-exposure signs/symptoms

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Section 4. First aid measures

: No specific data. **Eye contact** : No specific data. Inhalation . No specific data. Skin contact

Adverse symptoms may include the following: Ingestion

nausea or vomiting, aspiration

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. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

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. Avoid breathing vapor or mist. 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 nonemergency 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.

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Section 6. Accidental release measures

Large spill

: Stop leak if without risk. Move containers from spill area. Approach release from upwind. 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. Contaminated absorbent material may pose the same hazard as the spilled product. 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). Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. 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 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.

including any incompatibilities

Conditions for safe storage, : 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. Store locked up. 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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

CGIH TLV (United States, 3/2019). WA: 5 mg/m³ 8 hours. Form: Inhalable action SHA PEL (United States, 5/2018). WA: 5 mg/m³ 8 hours. OSH REL (United States, 10/2016). WA: 5 mg/m³ 10 hours. Form: Mist

Appropriate engineering controls

Environmental exposure controls

- : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- : 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.

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Section 8. Exposure controls/personal protection

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 sideshields.

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. 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.

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

Appearance

Physical state : Liquid.

Color : Colorless to light yellow.

Odor : Mild hydrocarbon. **Odor threshold** Not available.

pН : Not available. : Not available. **Melting point**

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

Flash point : Open cup: 116°C (240.8°F) [Cleveland.]

Evaporation rate : Not available. Flammability (solid, gas) : Not available. Lower and upper explosive : Not available.

(flammable) limits

: Not available. Vapor pressure Vapor density : Not available.

Relative density : 0.893

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

:Not available. Solubility in water

Partition coefficient: n-

octanol/water

:>6

Auto-ignition temperature : Not available. **Decomposition temperature** : Not available.

Viscosity : Kinematic (40°C (104°F)): 0.0513 cm²/s (5.13 cSt)

Flow time (ISO 2431) : Not available. **Pour point** : -62°C (-79.6°F)

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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), hydrotreated light naphthenic	LC50 Inhalation Dusts and mists	Rat	5.7 mg/l	4 hours
	LD50 Dermal LD50 Oral		>2000 mg/kg >5000 mg/kg	-

Irritation/Corrosion

Not available.

Sensitization

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

Name	Result
Distillates (petroleum), hydrotreated light naphthenic	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

: Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

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Section 11. Toxicological information

Eye contact
 Inhalation
 No known significant effects or critical hazards.
 Skin contact
 No known significant effects or critical hazards.
 Ingestion
 May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion: Adverse symptoms may include the following:

nausea or vomiting

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

Short term exposure

Potential immediate : Not available.

effects

Potential delayed effects: Not available.

Long term exposure

Potential immediate : Not available.

effects

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.
 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

Product/ingredient name	(3	Dermal (mg/kg)	Inhalation (gases) (ppm)	(vapors)	Inhalation (dusts and mists) (mg/ I)
Distillates (petroleum), hydrotreated light naphthenic	N/A	2500	N/A	N/A	5.7

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Distillates (petroleum), hydrotreated light naphthenic	Acute EC50 >100 mg/l	Algae	72 hours
	Acute EC50 >100 mg/l Acute LC50 >100 mg/l	Crustaceans Fish	48 hours 96 hours

Persistence and degradability

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Section 12. Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Distillates (petroleum),	-	-	Inherent
hydrotreated light naphthenic			

Bioaccumulative potential

LogP _{ow}	BCF	Potential
>6	-	high
	-	

Mobility in soil

Soil/water partition coefficient (Koc)

: 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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

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 and the IBC Code

: Not available.

Section 15. Regulatory information

U.S. Federal regulations

: TSCA 8(a) CDR Exempt/Partial exemption: All components are listed or exempted.

Clean Water Act (CWA) 307: ethylbenzene; chrysene; benz[a]anthracene

Clean Water Act (CWA) 311: ethylbenzene

Clean Air Act Section 112

(b) Hazardous Air **Pollutants (HAPs)** : Listed

Clean Air Act Section 602

: Not listed

Class I Substances

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Section 15. Regulatory information

Clean Air Act Section 602

Class II Substances

: Not listed

DEA List I Chemicals

: Not listed

(Precursor Chemicals)

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 : ASPIRATION HAZARD - Category 1

Composition/information on ingredients

Name	%	Classification
Distillates (petroleum), hydrotreated light naphthenic	≥90	ASPIRATION HAZARD - Category 1

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	1, 3	218-01-9 56-55-3	<0.1 <0.01

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed: MINERAL OIL, PETROLEUM DISTILLATES,

HYDROTREATED LIGHT NAPHTHENIC

New York
None of the components are listed.
New Jersey
None of the components are listed.
Pennsylvania
None of the components are listed.

California Prop. 65

MARNING: This product can expose you to chemicals including Chrysene, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Information provided is based on industrial use and may not be relevant to consumer applications.

Ingredient name	Concentration (%)	No significant risk level	Maximum acceptable dosage level
Chrysene	0.0003479	Yes.	-
Ethylbenzene	0.00019839	Yes.	-
Benz[a]anthracene	0.0001176	Yes.	-
Cumene	0.00010149	-	-

International lists

National inventory

Australia : All components are listed or exempted.

Canada : All components are listed or exempted.

China : All components are listed or exempted.

Europe : All components are listed or exempted.

Japan : Japan inventory (ENCS): All components are listed or exempted.

Japan inventory (ISHL): Not determined.

New Zealand : All components are listed or exempted.
Philippines : All components are listed or exempted.

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Section 15. Regulatory information

Republic of Korea :All components are listed or exempted.

Taiwan :All components are listed or exempted.

Thailand :Not determined.

Turkey :All components are listed or exempted.
United States :All components are listed or exempted.

Viet Nam : All components are listed or exempted.

Section 16. Other information

Procedure used to derive the classification

Classification	Justification
Asp. Tox. 1, H304	Calculation method

History

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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 = International Convention for the Prevention of Pollution From Ships, 1973

as modified by the Protocol of 1978. ("Marpol" = marine pollution)

N/A = Not available SGG = Segregation Group 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.

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