SAFETY DATA SHEET

Calsol 510



Section 1. Identification

Chemical name : Dist Other means of : Bas identification Hyd petri hyd nap MIN	00104100000
Other means of : Bas identification Hyd petr hyd nap MIN	
identification Hyd petr hyd nap MIN	istillates (petroleum), hydrotreated heavy naphthenic
	aseoil - unspecified; Distillates, petroleum, hydrotreated heavy naphthenic; ydrotreated heavy naphthenic distillate, solvent extract, petroleum; Mineral oil, etroleum distillates, hydrotreated heavy naphthenic; Mineral oil, petroleum distillates, ydrotreated (severe) heavy naphthenic; Distillates (petroleum), hydro-treated heavy aphthenic; Hydrotreated heavy naphthenic distillate solvent extract (petroleum); OILS, INERAL, HEAVY NAPHTHENIC, HYDROTREATED; OILS, NAPHTHENIC, YDROGENATED; SEVERELY SOLVENT REFINED HEAVY PARAFFINIC ISTILLATES; HYDROTREATED LIGHT PETROLEUM DISTILLATE
Product type : Liqu	quid.

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

Identified uses	
Petrochemical industry: Petroleum refining. Naphthenic Lubricant.	
Uses advised against	Reason
None known.	

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 T: 609-695-6211/800-257-9365 Orders@RECarroll.com

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

 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.	
Date of issue/Date of revision	: 03/02/2020 Version : 4 1/1	

Section 2. Hazards identification

Hazards not otherwise classified

: None known.

Section 3. Composition/information on ingredients

Substance/mixture	: Substance
Chemical name	: Distillates (petroleum), hydrotreated heavy naphthenic
Other means of identification	: Base oil - unspecified; Distillates, petroleum, hydrotreated heavy naphthenic; Hydrotreated heavy naphthenic distillate, solvent extract, petroleum; Mineral oil, petroleum distillates, hydrotreated heavy naphthenic; Mineral oil, petroleum distillates, hydrotreated (severe) heavy naphthenic; Distillates (petroleum), hydro-treated heavy naphthenic; Hydrotreated heavy naphthenic distillate solvent extract (petroleum); OILS, MINERAL, HEAVY NAPHTHENIC, HYDROTREATED; OILS, NAPHTHENIC, HYDROGENATED; SEVERELY SOLVENT REFINED HEAVY PARAFFINIC DISTILLATES; HYDROTREATED LIGHT PETROLEUM DISTILLATE

CAS number/other identifiers

CAS number	: 64742-52-5		
Ingredient name		%	CAS number
Distillates (petroleum), hyd	rotreated heavy naphthenic	100	64742-52-5

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 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 symptom	s/effects, acute and delayed	
Potential acute health ef		

Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.

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Section 4. First aid measures

Skin contact	: No known significant effects or critical hazards.
Ingestion	: May be fatal if swallowed and enters airways.
Over-exposure signs/symp	<u>otoms</u>
Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: Adverse symptoms may include the following: nausea or vomiting
Indication of immediate mediate	dical 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 proceduresFor 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 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

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Section 6. Accidental release measures

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. 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.
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. 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

Ingredient name	Exposure limits
Distillates (petroleum), hydrotreated heavy naphthenic	ACGIH TLV (United States, 3/2019). TWA: 5 mg/m ³ 8 hours. Form: Inhalable fraction OSHA PEL (United States, 5/2018). TWA: 5 mg/m ³ 8 hours. NIOSH REL (United States, 10/2016). TWA: 5 mg/m ³ 10 hours. Form: Mist STEL: 10 mg/m ³ 15 minutes. Form: Mist

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

Section 8. Exposure controls/personal protection

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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. 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	: Not available.
Odor	: Not available.
Odor threshold	: Not available.
рН	: Not available.
Melting point	: Not available.
Boiling point	: Not available.
Flash point	: Open cup: 165°C (329°F) [Cleveland.]
Evaporation rate	: <0.0372 (butyl acetate = 1)
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: 0.0021 kPa (0.016 mm Hg) [room temperature]
Vapor density	: Not available.
Relative density	: 0.9
Solubility	: Insoluble in the following materials: cold water and hot water.
Solubility in water	: Not available.
Partition coefficient: n- octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Kinematic (40°C (104°F)): 0.187 to 0.2183 cm²/s (18.7 to 21.83 cSt)
Flow time (ISO 2431)	: Not available.

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Section 9. Physical and chemical properties

Pour point

: -43°C (-45.4°F)

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 heavy 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 heavy naphthenic	ASPIRATION HAZARD - Category 1

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Section 11. Toxicological information

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	1	May be fatal if swallowed and enters airways.
Symptoms related to the phy	sic	al, 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 effects	: Not available.
Potential delayed effects	: Not available.
Long term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health effe	ects
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	Oral (mg/ kg)	(mg/kg)		(vapors)	Inhalation (dusts and mists) (mg/ I)
Distillates (petroleum), hydrotreated heavy naphthenic	N/A	2500	N/A	N/A	5.7

Section 12. Ecological information

<u>Toxicity</u>			
Product/ingredient name	Result	Species	Exposure
Distillates (petroleum), hydrotreated heavy 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

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

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition	: Not available.
coefficient (Koc)	

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.
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Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	ΙΑΤΑ
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 : Not available. to Annex II of MARPOL and the IBC Code

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: Chrysene
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.
<u>SARA 311/312</u>	
Classification	: ASPIRATION HAZARD - Category 1
Composition/information	on ingredients

No products were found.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	Chrysene	218-01-9	0.00034

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

: The following components are listed: OIL MIST, MINERAL
: None of the components are listed.
: The following components are listed: MINERAL OIL (HIGHLY REFINED); OIL MIST, MINERAL
: None of the components are listed.

California Prop. 65

WARNING: This product can expose you to 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.

	Concentration (%)	level	Maximum acceptable dosage level
Chrysene	0.00034	Yes.	-

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.

Section 15. Regulatory information

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.
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		Expert judgment	
History			
Date of issue/Date of revision	: 03/02/2020		
Version	: 4		
Key to abbreviations	IATA = International Air Tra IBC = Intermediate Bulk Co IMDG = International Mariti LogPow = logarithm of the MARPOL = International C	actor ed System of Classification and Labelling of Chemicals ansport Association ontainer ime Dangerous Goods octanol/water partition coefficient onvention for the Prevention of Pollution From Ships, 1973 I of 1978. ("Marpol" = marine pollution)	

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.