SAFETY DATA SHEET

Calumet 142 Flash <1%



Section 1. Identification

GHS product identifier	: Calumet 142 Flash <1%
Product code	: 300710100000
Chemical name	: Distillates (petroleum), hydrotreated light
Other means of identification	 Kerosine - unspecified; Distillates, petroleum, hydrotreated light; Hydrotreated light distillate; Jet fuels; lamp oil; Kerosene (petroleum), hydrotreated; Hydrotreated light distillates (petroleum); DISTILLATES; Deodorized kerosene; Dearomatized kerosine; Low odor paraffinic solvent
Product type	: Liquid.

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

Identified uses	
Petrochemical industry: Petroleum refining. Solvent.	
Uses advised against	Reason
	Reason

	Calumet Refining, LLC 2780 Waterfront Pkwy E. Drive Suite 200 Indianapolis, IN 46214 USA Technical Services: 317-328-5660
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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	: FLAMMABLE LIQUIDS - Category 4 ASPIRATION HAZARD - Category 1
GHS label elements	
Hazard pictograms	
Signal word	: Danger
Hazard statements	: Combustible liquid. May be fatal if swallowed and enters airways.
Precautionary statements	
Prevention	: Wear protective gloves. Wear eye or face protection. Keep away from flames and hot surfaces No smoking.
Response	: IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.
Storage	: Store locked up. Store in a well-ventilated place. Keep cool.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Section 2. Hazards identification

Hazards not otherwise classified

: None known.

Section 3. Composition/information on ingredients

Substance/mixture	:	Substance
Chemical name	:	Distillates (petroleum), hydrotreated light
Other means of identification	:	Kerosine - unspecified; Distillates, petroleum, hydrotreated light; Hydrotreated light distillate; Jet fuels; lamp oil; Kerosene (petroleum), hydrotreated; Hydrotreated light distillates (petroleum); DISTILLATES; Deodorized kerosene; Dearomatized kerosine; Low odor paraffinic solvent

CAS number/other identifiers

CAS number : 64742-47-8		
Ingredient name	%	CAS number
Distillates (petroleum), hydrotreated light	100	64742-47-8

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.
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	Wash skin thoroughly with soap and water or use recognized skin cleanser. 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	<u>i effects</u>
Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: Defatting to the skin. May cause skin dryness and irritation.
Ingestion	: May be fatal if swallowed and enters airways.
Over-exposure signs	/symptoms

Date of issue/Date of revision

Section 4. First aid measures

Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: Adverse symptoms may include the following: irritation dryness cracking
Ingestion	: Adverse symptoms may include the following: nausea or vomiting
Indication of immediate med	lical 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 dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: Combustible liquid. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.
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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
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, protec	ive equipment and emergency procedures			
For non-emergency personnel	: No action shall be taken involving any personal risk or wi Evacuate surrounding areas. Keep unnecessary and un entering. Do not touch or walk through spilled material. No flares, smoking or flames in hazard area. Avoid brea adequate ventilation. Wear appropriate respirator when on appropriate personal protective equipment.	protected perso Shut off all ign thing vapor or	onnel from ition sourc mist. Prov	ces. vide
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 and sewers. Inform the relevant authorities if the product pollution (sewers, waterways, soil or air).			
Date of issue/Date of revision	: 04/08/2019	Version	: 5.01	3/10

Section 6. Accidental release measures

Methods and materials for containment and cleaning up

Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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. Use spark-proof tools and explosion-proof equipment. 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. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. 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 a segregated and approved area. 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. Eliminate all ignition sources. Separate from oxidizing materials. 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 light	ACGIH TLV (United States, 3/2017). Absorbed through skin. TWA: 200 mg/m ³ , (as total hydrocarbon vapor) 8 hours.

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Section 8. Exposure controls/personal protection

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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 meas	sures
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

<u>Appearance</u>	
Physical state	: Liquid. [Mobile liquid.]
Color	: Colorless.
Odor	: Mild. Hydrocarbon.
Odor threshold	: Not available.
рН	: Not available.
Melting point	: -49°C (-56.2°F)
Boiling point	: 190 to 210°C (374 to 410°F)
Flash point	: Closed cup: 65°C (149°F) [Tagliabue.] [Product does not sustain combustion.]
Evaporation rate	: 0.03 (butyl acetate = 1)
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Lower: 0.6% Upper: 5.5%
Vapor pressure	: 0.072 kPa (0.54 mm Hg) [room temperature]
Vapor density	: 4.5 [Air = 1]
Relative density	: 0.783
Solubility	: Insoluble in the following materials: cold water and hot water.
Solubility in water	: 1.5 g/l

Section 9. Physical and chemical properties

Partition coefficient: n- octanol/water	: Not applicable.
Auto-ignition temperature	: >220°C (>428°F)
Decomposition temperature	: Not available.
Viscosity	: Kinematic (40°C (104°F)): 0.0134 cm²/s (1.34 cSt)
Flow time (ISO 2431)	: Not available.
Pour point	: -51.111°C (-60°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	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials
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	LD50 Dermal	Rabbit	>2000 mg/kg	-
, , , , , , , , , , , , , , , , , , , ,	LD50 Oral	Rat	>5000 mg/kg	-

Irritation/Corrosion

Not available.

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Section 11. Toxicological information

Not available.

Aspiration hazard

Name		Result		
Distillates (petroleum), hydrotreated light		ASPIRATION HAZARD - Category 1		
Information on the likely routes of exposure	: Routes of entry anticipated: Ora	al, Dermal, Inhalation.		
Potential acute health effec	<u>ts</u>			
Eye contact	: No known significant effects or	critical hazards.		
Inhalation	: No known significant effects or	critical hazards.		
Skin contact	: Defatting to the skin. May caus	se skin dryness and irritation.		
Ingestion	: May be fatal if swallowed and enters airways.			
Symptoms related to the pr	nysical, chemical and toxicological	characteristics		
Eye contact	: No specific data.			
Inhalation	: No specific data.			
Skin contact	: Adverse symptoms may include irritation dryness cracking	e the following:		
Ingestion	: Adverse symptoms may include nausea or vomiting	e the following:		
-	, , ,			
-	nausea or vomiting			
Delayed and immediate effe	nausea or vomiting			
<u>Delayed and immediate effe</u> <u>Short term exposure</u> Potential immediate	nausea or vomiting ects and also chronic effects from : Not available.			
<u>Delayed and immediate effe</u> <u>Short term exposure</u> Potential immediate effects	nausea or vomiting ects and also chronic effects from : Not available.			
Delayed and immediate effe Short term exposure Potential immediate effects Potential delayed effects	nausea or vomiting ects and also chronic effects from : Not available.			
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Delayed and immediate effe Short term exposure Potential immediate effects Potential delayed effects Long term exposure Potential immediate effects Potential delayed effects Potential delayed effects Potential chronic health effects Not available.	nausea or vomiting ects and also chronic effects from : Not available. : Not available. : Not available. : Not available. : Not available. : Prolonged or repeated contact	short and long term exposure		
Delayed and immediate effe Short term exposure Potential immediate effects Potential delayed effects Long term exposure Potential immediate effects Potential delayed effects Potential delayed effects Potential chronic health effects Not available. General	 nausea or vomiting acts and also chronic effects from : Not available. : Prolonged or repeated contact dermatitis. 	short and long term exposure can defat the skin and lead to irritation, cracking and/or critical hazards.		
Delayed and immediate effe Short term exposure Potential immediate effects Potential delayed effects Long term exposure Potential immediate effects Potential delayed effects Potential delayed effects Potential chronic health effects Not available. General Carcinogenicity	 nausea or vomiting ects and also chronic effects from : Not available. : Frolonged or repeated contact dermatitis. : No known significant effects or 	short and long term exposure can defat the skin and lead to irritation, cracking and/or critical hazards. critical hazards.		
Delayed and immediate effe Short term exposure Potential immediate effects Potential delayed effects Long term exposure Potential immediate effects Potential delayed effects Potential delayed effects Potential chronic health eff Not available. General Carcinogenicity Mutagenicity	 nausea or vomiting acts and also chronic effects from Not available. Not available. Not available. Not available. ffects Prolonged or repeated contact dermatitis. No known significant effects or No known significant effects or 	short and long term exposure can defat the skin and lead to irritation, cracking and/or critical hazards. critical hazards. critical hazards.		

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

<u>I OXICITY</u>				
Product/ingredient name	Result	Species	Exposure	
Distillates (petroleum), hydrotreated light	Acute EC50 >1000 mg/l	Algae	72 hours	
	Acute LC50 >1000 mg/l Fresh water	Daphnia	48 hours	

Persistence and degradability

Product/ingredient name	Test	Result		Dose	Inoculum
Distillates (petroleum), hydrotreated light	OECD 301F Ready Biodegradability - Manometric Respirometry Test	69 % - Readily - 28	days	-	-
Product/ingredient name	Aquatic half-life		Photolysis	i	Biodegradability
Distillates (petroleum), hydrotreated light	-		-		Readily

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

Dienoeal	methods
Dispusa	methous

: 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. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

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.

8/10

Section 14. Transport information

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

Section 15. Regulatory information

J.S. Federal regulations	: TSCA 8(a) CDR Exempt/Partial exemption: 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	

No products were found.

SARA 304 RQ

: Not applicable.

SARA 311/312

Classification	: FLAMMABLE LIQUIDS - Category 4

ASPIRATION HAZARD - Category 1

Composition/information on ingredients

Name	%	Classification
Distillates (petroleum), hydrotreated light		FLAMMABLE LIQUIDS - Category 4 ASPIRATION HAZARD - Category 1

State regulations

Massachusetts	: This material is not listed.
New York	: This material is not listed.
New Jersey	: This material is not listed.
Pennsylvania	: This material is not listed.
California Prop. 65	

This product is not known to contain California Prop 65 substances ≥1 ppm

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.
Japan	: Japan inventory (ENCS): This material is listed or exempted. Japan inventory (ISHL): Not determined.
Malaysia	: This material is listed or exempted.
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.

Date of issue/Date of revision

Section 15. Regulatory information

Thailand	
Turkey	

: Not determined.

United States

: This material is listed or exempted.

Viet Nam

- : This material is listed or exempted.
- : This material is listed or exempted.

Section 16. Other information

Hazardous Material Information System (U.S.A.)



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

Procedure used to derive the classification

Classification	Justification
	On basis of test data On basis of test data

<u>History</u>	
Date of issue/Date of revision	: 04/08/2019
Version	: 5.01
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 = Internediate 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) UN = United Nations
🔽 Indiantan information ti	hat has sharrowd from musicially issued version

✓ 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.