Safety Data Sheet



SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Chevron Heat Transfer Oil Grade 46

Product Number(s): 219377, 231709

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

Identified Uses: Industrial Oil

1.3 Details of the supplier of the safety data sheet

Chevron Products UK Limited 1 Westferry Circus Canary Wharf London E14 4HA United Kingdom

email: eumsds@chevron.com

1.4 Emergency telephone number

Transportation Emergency Response

Europe: 0044/(0)18 65 407333 and CHEMTREC: +1 703 527 3887

Health Emergency

Chevron Emergency Information Center: Located in the USA, international calls accepted 24 hours: +1

510 231 0623

Europe: 0044/(0)18 65 407333

Product Information

Product Information: FAX number: 0044/20 77 19 5171

SECTION 2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

CLP CLASSIFICATION: Not classified as dangerous according to EU regulatory guidelines.

2.2 Label elements

Under the criteria of Regulation (EC) No 1272/2008 (CLP): Not classified

2.3 Other hazards Not Applicable

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

This material is a mixture.

Revision Number: 0 1 of 9 **Chevron Heat Transfer Oil Grade 46 Revision Date:** November 10, 2020 **MSDS:** 54155

COMPONENTS	CAS	EC	REGISTRATION	CLP	AMOUNT
	NUMBER	NUMBER	NUMBER	CLASSIFICATION	
Highly refined mineral oil (C15 - C50)	Mixture	*	***	None	90 - 95 %weig ht
Distillates (petroleum) hydrotreated heavy paraffinic	64742-54-7	265-157-1	01-2119484627-25	None	5 - 10 %weig ht

^{*}Contains one or more of the following EINECS numbers: 265-090-8, 265-091-3, 265-096-0, 265-097-6, 265-098-1, 265-101-6, 265-155-0, 265-156-6, 265-157-1, 265-158-7, 265-159-2, 265-160-8, 265-166-0, 265-169-7, 265-176-5, 276-736-3, 276-737-9, 276-738-4, 278-012-2.

*** Contains one or more of the following REACH registration numbers: 01-211948706-23, 01-2119487067-30, 01-2119487081-40, 01-2119483621-38, 01-2119480374-36, 01-2119488707-21, 01-2119467170-45, 01-2119480375-34, 01-2119484627-25, 01-2119480132-48, 01-2119487077-29, 01-2119489287-22, 01-2119480472-38, 01-2119471299-27, 01-2119485040-48, 01-2119555262-43, 01-2119495601-36, 01-2119474889-13, 01-2119474878-16.

SECTION 4 FIRST AID MEASURES

4.1 Description of first aid measures

Eye: No specific first aid measures are required. As a precaution, remove contact lenses, if worn, and flush eyes with water.

Skin: No specific first aid measures are required. As a precaution, remove clothing and shoes if contaminated. To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.

Ingestion: No specific first aid measures are required. Do not induce vomiting. As a precaution, get medical advice.

Inhalation: No specific first aid measures are required. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

4.2 Most important symptoms and effects, both acute and delayed IMMEDIATE SYMPTOMS AND HEALTH EFFECTS

Eye: Not expected to cause prolonged or significant eye irritation.

Skin: Contact with the skin is not expected to be harmful.

Ingestion: Not expected to be harmful if swallowed.

Inhalation: Not expected to be harmful if inhaled. Contains a petroleum-based mineral oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficulty breathing.

DELAYED OR OTHER SYMPTOMS AND HEALTH EFFECTS: Not classified.

4.3 Indication of any immediate medical attention and special treatment needed Not applicable.

SECTION 5 FIRE FIGHTING MEASURES

5.1 Extinguishing media

Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

5.2 Special hazards arising from the substance or mixture

Combustion Products: Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic

Revision Number: 0 2 of 9 **Chevron Heat Transfer Oil Grade 46 Revision Date:** November 10, 2020 **MSDS:** 54155

compounds will be evolved when this material undergoes combustion.

5.3 Advice for firefighters

This material will burn although it is not easily ignited. See Section 7 for proper handling and storage. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Eliminate all sources of ignition in vicinity of spilled material. Refer to Sections 5 and 8 for more information.

6.2 Environmental precautions

Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater.

6.3 Methods and material for containment and cleaning up

Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. Where feasible and appropriate, remove contaminated soil and dispose of in a manner consistent with applicable requirements. Place other contaminated materials in disposable containers and dispose of in a manner consistent with applicable requirements. Report spills to local authorities as appropriate or required.

6.4 Reference to other sections

See sections 8 and 13.

SECTION 7 HANDLING AND STORAGE

7.1 Precautions for safe handling

General Handling Information: Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

Precautionary Measures: Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Wash thoroughly after handling.

Static Hazard: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures.

Container Warnings: Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can 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. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

7.2 Conditions for safe storage, including any incompatibilities Not Applicable

7.3 Specific end use(s):Industrial Oil

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

GENERAL CONSIDERATIONS:

Revision Number: 0 3 of 9 Revision Date: November 10, 2020 MSDS: 54155 Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances. Refer to appropriate CEN standards.

8.1 Control parameters

Occupational Exposure Limits:

Component	Country/ Agency	Form	TWA	STEL	Ceiling	Notation
Highly refined mineral oil (C15 - C50)	United Kingdom		5 mg/m3	10 mg/m3		

Consult local authorities for appropriate values.

8.2 Exposure controls **ENGINEERING CONTROLS:**

Use in a well-ventilated area.

PERSONAL PROTECTIVE EQUIPMENT

Eye/Face Protection: No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice.

Skin Protection: No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances in the workplace. Suggested materials for protective gloves include: 4H (PE/EVAL), Nitrile Rubber, Silver Shield, Viton.

Respiratory Protection: No respiratory protection is normally required. If user operations generate an oil mist, determine if airborne concentrations are below the occupational exposure limit for mineral oil mist. If not, wear an approved respirator that provides adequate protection from the measured concentrations of this material. For air-purifying respirators use a particulate cartridge.

ENVIRONMENTAL EXPOSURE CONTROLS:

See relevant Community environmental protection legislation or the Annex, as applicable.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Attention: the data below are typical values and do not constitute a specification.

9.1 Information on basic physical and chemical properties

Appearance

Color: Colorless to yellow **Physical State:** Liquid Odor: Petroleum odor

Odor Threshold: No data available

pH: No data available

No data available **Melting Point: Freezing Point:** No data available **Initial Boiling Point:** No data available

Flashpoint: (Cleveland Open Cup) 220 °C (428 °F) (Minimum)

Evaporation Rate: No data available Flammability (solid, gas): Not Applicable

Flammability (Explosive) Limits (% by volume in air):

Lower: No data available Upper: No data available

Vapor Pressure: No data available Vapor Density (Air = 1): No data available

Revision Number: 0 4 of 9 Chevron Heat Transfer Oil Grade 46 Revision Date: November 10, 2020 MSDS: 54155

Density: 0.8650 kg/l @ 15°C (59°F) (Typical)

Solubility: Soluble in hydrocarbons; insoluble in water Partition coefficient: n-octanol/water: No data available Auto-ignition temperature: No data available Decomposition temperature: No data available Viscosity: 39.20 mm2/s @ 40°C (104°F) (Minimum)

Explosive Properties: No Data Available **Oxidising properties:** No Data Available

9.2 Other Information: No Data Available

SECTION 10 STABILITY AND REACTIVITY

10.1 Reactivity: May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

10.2 Chemical Stability: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions: Hazardous polymerization will not occur.

10.4 Conditions to Avoid: Not applicable

10.5 Incompatible materials to avoid: Not applicable

10.6 Hazardous decomposition products: None known (None expected)

SECTION 11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Product Information:

Serious Eye Damage/Irritation: The eye irritation hazard is based on evaluation of data for product components.

Skin Corrosion/Irritation: The skin irritation hazard is based on evaluation of data for product components.

Skin Sensitization: The skin sensitization hazard is based on evaluation of data for product components.

Acute Dermal Toxicity: The acute dermal toxicity hazard is based on evaluation of data for product components.

Acute Toxicity Estimate (dermal): Not Applicable

Acute Oral Toxicity: The acute oral toxicity hazard is based on evaluation of data for product components.

Acute Toxicity Estimate (oral): Not Applicable

Acute Inhalation Toxicity: The acute inhalation toxicity hazard is based on evaluation of data for product components.

Acute Toxicity Estimate (inhalation): Not Applicable

Germ Cell Mutagenicity: The hazard evaluation is based on data for components or a similar material.

Carcinogenicity: The hazard evaluation is based on data for components or a similar material.

Reproductive Toxicity: The hazard evaluation is based on data for components or a similar material.

Specific Target Organ Toxicity - Single Exposure: The hazard evaluation is based on data for components or a similar material.

Revision Number: 0 5 of 9 **Chevron Heat Transfer Oil Grade 46 Revision Date:** November 10, 2020 **MSDS:** 54155

Specific Target Organ Toxicity - Repeated Exposure: The hazard evaluation is based on data for components or a similar material.

Aspiration Hazard: No data available

Compoi	nont	Inform	ation:
Compo	nent	miorm	auon:

component information.	
Serious Eye Damage/Irritation:	
Highly refined mineral oil (C15 - C50)	Based on available data, the classification criteria are not met
Distillates (petroleum) hydrotreated heavy paraffinic	Based on available data, the classification criteria are not met
Skin Corrosion/Irritation:	
Highly refined mineral oil (C15 - C50)	Based on available data, the classification criteria are not met
Distillates (petroleum) hydrotreated heavy paraffinic	Based on available data, the classification criteria are not met
Skin Sensitization:	
Highly refined mineral oil (C15 - C50)	Based on available data, the classification criteria are not met
Distillates (petroleum) hydrotreated heavy paraffinic	Based on available data, the classification criteria are not met
Acute Dermal Toxicity:	
Highly refined mineral oil (C15 - C50)	Based on available data, the classification criteria are not met
Distillates (petroleum) hydrotreated heavy paraffinic	Based on available data, the classification criteria are not met
Acute Oral Toxicity:	
Highly refined mineral oil (C15 - C50)	Based on available data, the classification criteria are not met
Distillates (petroleum) hydrotreated heavy paraffinic	Based on available data, the classification criteria are not met
Acute Inhalation Toxicity:	
Highly refined mineral oil (C15 - C50)	Based on available data, the classification criteria are not met
Distillates (petroleum) hydrotreated heavy paraffinic	Based on available data, the classification criteria are not met
Germ Cell Mutagenicity:	
Highly refined mineral oil (C15 - C50)	Based on available data, the classification criteria are not met
Distillates (petroleum) hydrotreated heavy paraffinic	Based on available data, the classification criteria are not met
Carcinogenicity:	
Highly refined mineral oil (C15 - C50)	Based on available data, the classification criteria are not met
Distillates (petroleum) hydrotreated heavy paraffinic	Based on available data, the classification criteria are not met
Reproductive Toxicity:	
Highly refined mineral oil (C15 - C50)	Based on available data, the classification criteria are not met
Distillates (petroleum) hydrotreated heavy	Based on available data, the classification criteria are not met

Specific Target Organ Toxicity - Single Exposure:

paraffinic

Highly refined mineral oil (C15 - C50) Based on available data, the classification criteria are not met

Revision Number: 0 Chevron Heat Transfer Oil Grade 46 6 of 9 Revision Date: November 10, 2020 **MSDS**: 54155

Distillates (petroleum) hydrotreated heavy	Based on available data, the classification criteria are not met
paraffinic	

Specific Target Organ Toxicity - Repeated Exposure:			
Highly refined mineral oil (C15 - C50)	Based on available data, the classification criteria are not met		
Distillates (petroleum) hydrotreated heavy paraffinic	Based on available data, the classification criteria are not met		

ADDITIONAL TOXICOLOGY INFORMATION:

In accordance with the Regulation (EC)No 1272/2008, Nota L, reference IP 346/92: "DMSO Extraction Method", we have determined that the base oils used in this preparation are not carcinogenic.

SECTION 12 ECOLOGICAL INFORMATION

Product Information:

12.1 Toxicity

This material is not expected to be harmful to aquatic organisms. The product has not been tested. The statement has been derived from the properties of the individual components.

12.2 Persistence and degradability

This material is not expected to be readily biodegradable. The product has not been tested. The statement has been derived from the properties of the individual components.

12.3 Bioaccumulative potential

Bioconcentration Factor: No Data Available

Octanol/Water Partition Coefficient: No data available

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

This product is not, or does not contain, a substance that is a potential PBT or a vPvB.

12.6 Other adverse effects

No other adverse effects identified.

Component Information:

Acute Toxicity:	
Highly refined mineral oil (C15 - C50)	Based on available data, the classification criteria are not met
Distillates (petroleum) hydrotreated	Based on available data, the classification criteria are not met
heavy paraffinic	

Long-term Toxicity:	
Highly refined mineral oil (C15 - C50)	Based on available data, the classification criteria are not met
Distillates (petroleum) hydrotreated heavy paraffinic	Based on available data, the classification criteria are not met

Biodegradation:	
Highly refined mineral oil (C15 - C50)	Based on available data, the classification criteria are not met
Distillates (petroleum) hydrotreated	Based on available data, the classification criteria are not met
heavy paraffinic	

Bioaccumulative Potential:	
Highly refined mineral oil (C15 - C50)	Based on available data, the classification criteria are not met
Distillates (petroleum) hydrotreated	Based on available data, the classification criteria are not met

Revision Number: 0 7 of 9 **Chevron Heat Transfer Oil Grade 46 Revision Date:** November 10, 2020 **MSDS:** 54155

heavy paraffinic

SECTION 13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Use material for its intended purpose or recycle if possible. Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose of in a manner consistent with applicable regulations. Contact your sales representative or local environmental or health authorities for approved disposal or recycling methods.

In accordance with European Waste Catalogue (E.W.C.) the codification is the following: 13 02 05

SECTION 14 TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult appropriate Dangerous Goods Regulations for additional description requirements (e.g., technical name) and mode-specific or quantityspecific shipping requirements.

ADR/RID

NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT

14.1 UN number: Not applicable

14.2 UN proper shipping name: Not applicable 14.3 Transport hazard class(es): Not applicable

14.4 Packing group: Not applicable

14.5 Environmental hazards: Not applicable 14.6 Special precautions for user: Not applicable

ICAO / IATA

NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT

14.1 UN number: Not applicable

14.2 UN proper shipping name: Not applicable 14.3 Transport hazard class(es): Not applicable

14.4 Packing group: Not applicable

14.5 Environmental hazards: Not applicable 14.6 Special precautions for user: Not applicable

IMO / IMDG

NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT

14.1 UN number: Not applicable

14.2 UN proper shipping name: Not applicable 14.3 Transport hazard class(es): Not applicable

14.4 Packing group: Not applicable

14.5 Environmental hazards: Not applicable 14.6 Special precautions for user: Not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code: Not applicable

SECTION 15 REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture **REGULATORY LISTS SEARCHED:**

01=EU Directive 76/769/EEC: Restrictions on the marketing and use of certain dangerous substances.

02=EU Directive 90/394/EEC: Carcinogens at work.

03=EU Directive 92/85/EEC: Pregnant or breastfeeding workers.

04=EU Directive 96/82/EC (Seveso II): Article 9.

Revision Number: 0 8 of 9 Chevron Heat Transfer Oil Grade 46 Revision Date: November 10, 2020 MSDS: 54155

05=EU Directive 96/82/EC (Seveso II): Articles 6 and 7.

06=EU Directive 98/24/EC: Chemical agents at work.

07=EU Directive 2004/37/EC: On the protection of workers.

08=EU Regulation EC No. 689/2008: Annex 1, Part 1.

09=EU Regulation EC No. 689/2008: Annex 1, Part 2.

10=EU Regulation EC No. 689/2008: Annex 1, Part 3.

11=EU Regulation EC No. 850/2004: Prohibiting and restricting persistent organic pollutants (POPs).

12=EU REACH, Annex XVII: Restrictions on manufacture, placing on the market and use of certain dangerous substances, mixture & article.

13=EU REACH, Annex XIV: Candidate List of Substances of Very High Concern for Authorization (SVHC).

The following components of this material are found on the regulatory lists indicated. Distillates (petroleum) hydrotreated heavy paraffinic 02, 03, 04, 05, 06

CHEMICAL INVENTORIES:

All components comply with the following chemical inventory requirements: AIIC (Australia), DSL (Canada), EINECS (European Union), ENCS (Japan), IECSC (China), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (United States).

15.2 Chemical safety assessment

No chemical safety assessment.

SECTION 16 OTHER INFORMATION

REVISION STATEMENT: This is a new Safety Data Sheet. No revision information

Revision Date: November 10, 2020

Full text of CLP H-statements:

None

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

<u> </u>	1 111110 2000	=
TLV - Threshold Limit Value	TWA -	Time Weighted Average
STEL - Short-term Exposure Limit	PEL -	Permissible Exposure Limit
CVX - Chevron	CAS -	Chemical Abstract Service Number
NQ - Not Quantifiable		

Prepared according to the EU Regulation 1907/2006 (as amended) by Chevron Energy Technology Company, 6001 Bollinger Canyon Road, San Ramon, CA 94583.

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

No Annex

Revision Number: 0 Chevron Heat Transfer Oil Grade 46 9 of 9 Revision Date: November 10, 2020 MSDS: 54155