



SAFETY DATA SHEET

BASE OIL - EDC 95-11

The safety data sheet is in accordance with Commission Regulation (EU) 2020/878 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

SECTION 1: Identification of the substance / mixture and of the company / undertaking

Date issued 23.10.2012

Revision date 09.10.2024

1.1. Product identifier

Product name BASE OIL - EDC 95-11

Synonyms Hydrokarboner, C15-C20, n-alkaner, isoalkaner, sykliske, <0,03% aromater

REACH Reg. No. 01-2119827000-58

EC No. 934-956-3

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

Product group Liquid

Use of the substance / mixture Base oil.

1.3. Details of the supplier of the safety data sheet

Supplier

Company name Baker Hughes Norge AS

Office address Kontinentalvegen 8

Postal address Kontinentalvegen 8

Postcode 4056

City TANANGER

Country Norway

Telephone number +47 51 71 75 00

Fax +47 51 71 75 01

Email BHNorwayHS&ETeam@bakerhughes.com

Website www.bakerhughes.com

1.4. Emergency telephone number

Emergency telephone

Telephone number: +47 21 93 06 78
 Description: CHEMTREC Nødtelefonnummer (NO)

Telephone number: +47 22 59 13 00
 Description: Giftinformasjonen

Telephone number: +47 51 69 46 24
 Description: Beredskapstelefon

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to
 Regulation (EC) No 1272/2008
 [CLP / GHS]

Asp. Tox. 1; H304

Substance / mixture hazardous
 properties

May be fatal if swallowed and enters airways.

2.2. Label elements

Hazard pictograms (CLP)



Composition on the label

Hydrocarbons, C15-C20, n-alkanes, isoalkanes, cyclics, <0,03% aromatics

Signal word

Danger

Hazard statements

H304 May be fatal if swallowed and enters airways.

Precautionary statements

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor / physician.
 P331 Do NOT induce vomiting.
 P501 Dispose of contents / container to an approved waste facility.

2.3. Other hazards

PBT / vPvB

Not PBT / vPvB.

Health effect

Prolonged and repeated skin contact will cause defatting and possible irritation.

Other hazards

In case of spills, beware of slippery floors and surfaces.
 The chemical does not contain any known or suspected endocrine disruptors $\geq 0,1\%$.

SECTION 3: Composition / information on ingredients

3.1. Substances

Substance	Identification	Classification	Contents	Notes
Hydrocarbons, C15-C20, n-alkanes, isoalkanes, cyclics, <0,03% aromatics	EC No.: 934-956-3 REACH Reg. No.: 01-2119827000-58	Asp. tox 1; H304	100 %	
Description of the mixture	A complex and variable combination of paraffinic and cyclic hydrocarbons having			

Substance comments

a carbon number range predominantly of C15 to C20 and boiling in the range of approximately 250°C to 335°C. Total aromatic content : < 0.03 %.

See section 16 for explanation of hazard statements (H) listed above.

SECTION 4: First aid measures

4.1. Description of first aid measures

General

Emergency telephone number: see section 1.4. In case of unconsciousness or severe accidents, call 113.

Inhalation

Provide fresh air, warmth and rest, preferably in comfortable upright sitting position. Get medical attention if any discomfort continues.

Skin contact

Remove contaminated clothing. Rinse the skin immediately with lots of water. Consult a doctor if symptoms should occur. Wash contaminated clothing before reuse.

Eye contact

Promptly rinse eyes with plenty of water (tempered at 20-30°C) for at least 15 minutes. Remove contact lenses and open eyes wide apart. Contact physician if discomfort continues.

Ingestion

Rinse mouth thoroughly. DO NOT induce vomiting if swallowed chemical is dissolved in petroleum-based material. Danger of aspiration and development of chemical pneumonia. Immediately consult a doctor.
If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Never give anything by mouth to an unconscious person.

4.2. Most important symptoms and effects, both acute and delayed

General symptoms and effects

Risk of chemical pneumonia (pneumonitis) if aspirated during and after ingestion.

Acute symptoms and effects

Ingestion: If, by vomiting, the chemical reaches the lungs, life-threatening chemical pneumonia may develop. Symptoms such as coughing, breathing difficulties, vomiting or lethargy may indicate chemical pneumonitis. The chemical may irritate the stomach/intestines and can cause abdominal pain, nausea, vomiting and diarrhoea.
Inhalation: Solvent vapours are hazardous and may cause nausea, sickness and headaches. Vapors may irritate the respiratory tract. Overexposure can lead to nausea, vomiting and intoxication symptoms. Narcotic effect when inhaled.
Eye contact: May cause eye irritation. Symptoms may be stinging pain and redness in the eyes.

Delayed symptoms and effects

Skin contact: Prolonged and repeated skin contact will cause defatting and possible irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Medical monitoring for delayed effects

Monitor for 48 hours. Chemical pneumonia.

Other information

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Dry-powder, carbon dioxide (CO ₂), water mist, foam. Sand.
Improper extinguishing media	Do not use water jet.

5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	The chemical is not classified as flammable. Containers can burst violently when heated, due to excess pressure build-up.
Hazardous combustion products	May include, but is not limited to: Carbon monoxide (CO). Carbon dioxide (CO ₂). Hydrocarbons. Aldehydes. Soot.

5.3. Advice for firefighters

Personal protective equipment	Use compressed air equipment when the chemical is involved in fire. In case of evacuation, an approved protection mask should be used. See also section 8.
Other information	Containers close to fire should be removed immediately or cooled with water. Extinguishing water must not be discharged into drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	Remove all sources of ignition. Provide adequate ventilation.
Personal protection measures	Provide adequate ventilation. Use protective equipment as referred to in section 8. Avoid inhalation of vapours and contact with skin and eyes. In case of spills, beware of slippery floors and surfaces.

6.2. Environmental precautions

Environmental precautionary measures	Do not allow to enter into sewer, water system or soil.
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6.3. Methods and material for containment and cleaning up

Clean up	Stop the leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Do not use sawdust or other combustible material. Collect in a suitable container and dispose as hazardous waste according to section 13.
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6.4. Reference to other sections

Other instructions	See also sections 7, 8 and 13.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling	Provide adequate ventilation. Use protective equipment as referred to in section 8. Avoid swallowing. Avoid contact with skin and eyes. Avoid inhalation of vapor and oil mist.
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Contaminated rags and cloths must be put in fireproof containers for disposal.
In case of spills, beware of slippery floors and surfaces.

Protective safety measures

Safety measures to prevent fire

Keep away from sources of ignition.
Take precautionary measures against static discharges.
Ground / bond container and receiving equipment.

Advice on general occupational hygiene

Do not eat, drink or smoke during work. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage

Store in tightly closed original container in a dry, cool and well-ventilated place.
Keep upright.

Conditions to avoid

Avoid heat, flames and other sources of ignition. Take precautionary measures against static discharge.

Conditions for safe storage

Packaging compatibilities

Store in original container.

Requirements for storage rooms and vessels

Suitable containers: Stainless steel.

Advice on storage compatability

Keep away from: Strong acids. Sterke oksidasjonsmidler. Food and feed.

7.3. Specific end use(s)

Specific use(s)

See section 1.2.

SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Substance	Identification	Exposure limits	TWA Year
Oil vapour		Limit value (8 h) : 50 mg/m ³	
Oil mist (mineral particles)		Limit value (8 h) : 1 mg/m ³	
Control parameters comments	References (laws/regulations): Norwegian regulation on exposure limits: FOR 2011-12-06 nr. 1358 Forskrift om tiltaks- og grenseverdier (sist endret gjennom FOR-2024-05-15-785).		

8.2. Exposure controls

Precautionary measures to prevent exposure

Instruction on measures to prevent exposure

Reference is made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

Technical measures to prevent exposure

Provide adequate ventilation. The personal protective equipment must be CE-marked and the latest version of the standards shall be used. The protective equipment and the specified standards recommended below are only suggestions, and should be selected on advice from the supplier of such

equipment.

A risk assessment of the work place/work activities (the actual risk) may lead to other control measures. The protection equipment's suitability and durability will depend on application.

Eye / face protection

Eye protection equipment

Description: Risk of splashes: Wear tight-fitting goggles or face shield.

Reference to relevant standard: EN ISO 16321-1:2022 (Eye and face protection for occupational use - Part 1: General requirements).

Additional eye protection measures

Eye wash facilities should be available at the work place. Either a fixed eye wash facility connected to the drinking water (preferably warm water) or a portable disposable unit.

Hand protection

Suitable gloves type

Gloves of nitrile rubber, PVA or Viton are recommended.

Suitable materials

Nitrile. Viton rubber (fluor rubber). Polyvinylalkohol (PVA)

Breakthrough time

Value: > 480 minute(s)

Comments: Prolonged or repeated contact.

Value: > 60 minute(s)

Comments: If splashes are likely to occur/ short term contact.

Thickness of glove material

Value: > 0,55 mm

Comments: Prolonged or repeated contact.

Nitrilerubber: > 0,38 mm in case of splashes/short term contact.

Neoprenrubber: > 0,75 mm in case of splashes/short term contact.

Hand protection equipment

Description: Use protective gloves that are suitable for the application.

Glove thickness must be chosen in consultation with the glove supplier, who can inform about the breakthrough time for the glove. The gloves abilities may vary among the different glove manufacturers.

Reference to relevant standard: EN ISO 374 (Protective gloves against chemicals and micro-organisms). EN ISO 21420:2020 (Protective gloves - General requirements and test methods).

Additional hand protection measures

Replace gloves if signs of wear and tear. Gloves must only be worn on clean, dry hands.

Skin protection

Recommended protective clothing

Description: Wear appropriate protective clothing to protect against skin contact. Wear chemical resistant protective footwear.

Additional skin protection measures

Emergency shower should be available at the workplace.

Respiratory protection

Recommended respiratory protection

Description: If there is insufficient ventilation, use a respirator with type A-filter. Use combination filter A/P2 by aerosol formation.

Reference to relevant standard: EN 14387 (Respiratory protective devices. Gas filter(s) and combined filter(s). Requirements, testing, marking). BS-EN 140 (Respiratory protective devices. Half masks and quarter masks. Requirements,

testing, marking) EN 143 (Respiratory protective devices - Particle filters - Requirements, testing, marking).

Appropriate environmental exposure control

Environmental exposure controls Do not allow to enter into sewer, water system or soil.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Fluid.
Colour	Colourless.
Odour	Odourless.
pH	Comments: Not relevant.
Melting point / melting range	Comments: Not determined.
Boiling point / boiling range	Value: 250 - 335 °C Method: ISO 3405
Flash point	Value: > 115 °C Method: EN ISO 2719 Comments: Closed Cup
Flammability	Not relevant, see flash point.
Explosion limit	Value: 1 - 6 %
Vapour pressure	Value: < 0,0003 kPa
Vapour density	Comments: Not determined.
Particle characteristics	Comments: Not relevant for liquids.
Relative density	Value: 0,815 Method: ISO 12185
Density	Value: 0,815 g/cm ³ Method: ISO 12185 Temperature: 15 °C
Solubility	Medium: Water Comments: Insoluble.
Partition coefficient: n-octanol/ water	Comments: Not relevant.
Auto-ignition temperature	Value: > 230 °C Method: ASTM E 659
Decomposition temperature	Comments: Not determined.
Viscosity	Value: < 20,5 mm ² /s Method: ISO 3104 Temperature: 40 °C Type: Kinematic
Explosive properties	Not explosive.
Oxidising properties	Not oxidizing.

9.2. Other information

Other physical and chemical properties

Physical and chemical properties No further information is available.

9.2.2. Other safety characteristics

Comments No further information is available.

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stability Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions May arise in contact with incompatible materials (see section 10.5) and/or under inappropriate conditions (see section 10.4).

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition. Take precautionary measures against static discharge.

10.5. Incompatible materials

Materials to avoid Strong acids. Strong oxidizing agents.

10.6. Hazardous decomposition products

Hazardous decomposition products None under normal conditions. See also section 5.2.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Type of toxicity: Acute
Effect tested: LD50
Route of exposure: Oral
Method: OECD 401
Value: > 5000 mg/kg
Species: Rat
Type of toxicity: Acute
Effect tested: LC50
Route of exposure: Inhalation. (mist)
Method: OECD 403

Duration: 4 hour(s)
 Value: > 5266 mg/m³
 Species: Rat

Type of toxicity: Acute
 Effect tested: LD50
 Route of exposure: Dermal
 Method: OECD 402
 Duration: 24 hour(s)
 Value: > 3160 mg/kg
 Species: Rabbit

Other information regarding health hazards

Assessment of acute toxicity, classification	Based on available data, the classification criteria are not met.
Assessment of skin corrosion / irritation, classification	Based on available data, the classification criteria are not met.
Assessment of eye damage or irritation, classification	Based on available data, the classification criteria are not met.
Assessment of respiratory sensitisation, classification	Based on available data, the classification criteria are not met.
Assessment of skin sensitisation, classification	Based on available data, the classification criteria are not met.
Assessment of germ cell mutagenicity, classification	Based on available data, the classification criteria are not met.
Assessment of carcinogenicity, classification	Based on available data, the classification criteria are not met.
Assessment of reproductive toxicity, classification	Based on available data, the classification criteria are not met.
Assessment of specific target organ toxicity - single exposure, classification	Based on available data, the classification criteria are not met.
Assessment of specific target organ toxicity - repeated exposure, classification	Based on available data, the classification criteria are not met.
Assessment of aspiration hazard, classification	May be fatal if swallowed and enters airways.

Symptoms of exposure

In case of ingestion	Risk of chemical pneumonia (pneumonitis) if aspirated during and after ingestion. If, by vomiting, the chemical reaches the lungs, life-threatening chemical pneumonia may develop. Symptoms such as coughing, breathing difficulties, vomiting or lethargy may indicate chemical pneumonitis. However, ingestion may cause nausea, stomach pain and vomiting.
In case of skin contact	Prolonged and repeated skin contact will cause defatting and possible irritation.
In case of inhalation	Vapors may irritate the respiratory tract. Overexposure can lead to nausea, vomiting and intoxication symptoms. In high concentrations, vapours are narcotic and may cause headache, fatigue, dizziness and nausea.
In case of eye contact	Spray and vapour in the eyes may cause irritation and smarting.

11.2 Other information

Endocrine disruption

The chemical does not contain any known or suspected endocrine disruptors $\geq 0,1\%$.

SECTION 12: Ecological information

12.1. Toxicity

Aquatic toxicity, fish

Toxicity type: Acute
Value: 1028 mg/l
Effect dose concentration: LC50
Exposure time: 96 hour(s)
Species: Not specified.

Toxicity type: Chronic
Value: > 1000 mg/l
Effect dose concentration: NOELR
Exposure time: 21 day(s)
Species: *Oncorhynchus mykiss*
Comments: Fresh water

Aquatic toxicity, algae

Toxicity type: Acute
Value: 10000 mg/l
Effect dose concentration: EC50
Exposure time: 72 hour(s)
Species: *Skeletonema costatum*
Method: ISO 10253

Toxicity type: Chronic
Value: > 1000 mg/l
Effect dose concentration: NOELR
Exposure time: 21 day(s)
Species: *Skeletonema costatum*
Comments: Saltvann.

Aquatic toxicity, crustacean

Toxicity type: Acute
Value: 3193 mg/l
Effect dose concentration: EC50
Exposure time: 48 hour(s)
Species: *Acartia tonsa*
Method: ISO 14669

Toxicity type: Chronic
Value: > 1000 mg/l
Effect dose concentration: NOELR
Exposure time: 21 day(s)
Species: *Daphnia magna*
Comments: Fresh water.

Ecotoxicity

The chemical is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills may be potentially hazardous.

12.2. Persistence and degradability

Persistence and degradability description/evaluation	Readily biodegradable.
Biodegradability	Value: 74 % Method: OECD 306 Test period: 28 day(s)

12.3. Bioaccumulative potential

Bioconcentration factor (BCF)	Value: 171 Comments: Low bioaccumulation potential.
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12.4. Mobility in soil

Mobility	Insoluble in water. Floats on water. Expected to have relatively low mobility in soil.
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12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	Not PBT / vPvB.
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12.6. Endocrine disrupting properties

Endocrine disrupting properties	The chemical does not contain any known or suspected endocrine disruptors $\geq 0,1\%$.
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12.7. Other adverse effects

Additional ecological information	Do not allow to enter into sewer, water system or soil. Forms an oil film on water surfaces that may harm organisms in the water and disrupt oxygen transport in the boundary layer between air and water.
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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate methods of disposal for the chemical	Disposed of as hazardous waste by approved contractor. The waste code (EWC-Code) is intended as a guide. The code must be chosen by the user, if the use differs from the one mentioned below.
EWC waste code	EWC waste code: 13 08 99 wastes not otherwise specified Classified as hazardous waste: Yes EWC waste code: 16 05 08 discarded organic chemicals consisting of or containing dangerous substances Classified as hazardous waste: Yes
NORSAS	7042 Organic solvents, non -halogenated.
Other information	Do not empty into drains.

SECTION 14: Transport information

Dangerous goods	No
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14.1. UN number

Comments

Not considered as dangerous goods under UN, IMO, ADR/RID or IATA/ICAO regulations.

14.2. UN proper shipping name

Comments

Not relevant.

14.3. Transport hazard class(es)

Comments

Not relevant.

14.4. Packing group

Comments

Not relevant.

14.5. Environmental hazards

IMDG Marine pollutant

No

14.6. Special precautions for user

Special safety precautions for user

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.

14.7. Maritime transport in bulk according to IMO instruments

Transport in bulk (yes/no)

No

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations / legislation specific for the substance or mixture**

References (laws/regulations)

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP-regulation) with later amendments.
Regulation (EC) No 1907/2006 on the registration, evaluation, authorization and restriction of chemicals (REACH Regulation), with later amendments.
Norwegian regulation on waste, 01.06.2004 no. 930, with later amendments.
Norwegian regulation on dangerous goods: FOR 2009-04-01 nr 384: Forskrift om landtransport av farlig gods med senere endringer, Direktoratet for samfunnssikkerhet og beredskap.
Norwegian regulation on declaration: FOR-2015-05-19-541, 01.06.2015 with later amendments.

Comments

Contains no substances on the Authorisation list. Contains no SVHC - substances.

Declaration No.

43434

15.2. Chemical safety assessment

Chemical safety assessment performed	Yes
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SECTION 16: Other information

Supplier's notes	The information contained in this SDS must be made available to all those who handle the product.
List of relevant H-phrases (Section 2 and 3)	H304 May be fatal if swallowed and enters airways.
CLP classification, comments	Calculation method.
Key literature references and sources for data	Suppliers Safety data sheet dated: 11.04.2024
Abbreviations and acronyms used	ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road EWC: European Waste Code (a code from the EU's common classification system for waste) EC50: The effective concentration of substance that causes 50% of the maximum response IATA: The International Air Transport Association ICAO: The International Civil Aviation Organisation IMO: International Maritime Organization LC50: Median concentration lethal to 50% of a test population. LD50: Lethal dose, is the amount of a substance given to a group of test animals, which causes the death of 50%. NOELR: Ingen observerbar effektbelastning (No Observable Effect Loading Rate) PBT: Persistent, Bioaccumulative and Toxic RID: The Regulations concerning the International Carriage of Dangerous Goods by Rail UN: United Nations vPvB: very Persistent and very Bioaccumulative
Information added, deleted or revised	Sections being revised since previous version: 1 - 16
Checking quality of information	This SDS is quality controlled by Kiwa Kompetanse AS in Norway, certified according to the Quality Management System requirements specified in ISO 9001:2015.
Version	5
Prepared by	Kiwa Kompetanse, Norway by SR