

LUBEREF BrightStock Extract Specifications

Type of test	Method	Unit	Min/Max	Bright Stock Extract
Density at 15°C	ASTM D-4052	g/mL	Typical	Report
Color	ASTM D-1500	ASTM		> 8
Flash point COC	ASTM D-92	°C	Min	270
Flash point, PMCC	ASTM D-93	°C	Min	250
Furfural Content	ASTM D-5837	PPM	Max	40
Pour point	ASTM D-97	°C	Max	15
Visco at 50°C	ASTM D-445	mm ² /s	Min/Max	1400-1900
Visco at 100°C	ASTM D-445	mm ² /s	Min/Max	50-100
Refractive Index @ 70C	ASTM D-1747		Max	1.55
Sulfur Content	ASTM D-4294	wt %	Max	5

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

1.1. Product identifier

Product form : Substance
Trade name/designation : Bright Stock Extract
EC no : 265-110-5
CAS No : 64742-10-5

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

1.2.1. Relevant identified uses

No data available

1.2.2. Uses advised against

No data available

1.3. Details of the supplier of the safety data sheet

Saudi Aramco Luberef Co.
21432 Jeddah - Saudi Arabia
T +966 12 2296475 - F 920003550 x 6475
AljiffryA@luberef.com - www.luberef.com

1.4. Emergency telephone number

Country	Official advisory body	Address	Emergency number
Ireland	National Poisons Information Centre Beaumont Hospital	Beaumont Hospital Beaumont Road 9 Dublin	+353 1 809 21 66 (public, 8am - 10pm, 7/7) +353 01 809 2566 (Professionals, 24/7)
United Kingdom	National Poisons Information Service (Newcastle Centre) Regional Drugs and Therapeutics Centre, Wolfson Unit	Claremont Place Newcastle-upon-Tyne NE1 4LP Newcastle	0844 892 0111 (UK only, Monday to Friday, 08.00 to 18.00 hours, healthcare professionals only)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Carc. 2 H351

Full text of hazard classes and H-statements : see section 16

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS08

Signal word : Warning

Hazard statements (CLP) : H351 - Suspected of causing cancer.

Precautionary statements (CLP) : P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.

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P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P308+P313 - IF exposed or concerned: Get medical advice/attention.
P405 - Store locked up.
P501 - Dispose of contents/container to an approved waste disposal plant.

2.3. Other hazards

Other hazards : Results of PBT and vPvB assessment : Not applicable.

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance name : Bright Stock Extract
CAS No : 64742-10-5
EC no : 265-110-5

Substance name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Extracts, petroleum, residual oil solvent	(CAS No) 64742-10-5 (EC no) 265-110-5	100	Carc. 2, H351

Full text of H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

Additional advice : First aider: Pay attention to self-protection. Concerning personal protective equipment to use, see section 8. Never give anything by mouth to an unconscious person or a person with cramps. In case of doubt or persistent symptoms, consult always a physician. Show this safety data sheet to the doctor in attendance.

Inhalation : Remove person to fresh air and keep comfortable for breathing. In case of doubt or persistent symptoms, consult always a physician.

Skin contact : Take off contaminated clothing. Gently wash with plenty of soap and water. In case of doubt or persistent symptoms, consult always a physician.

Eyes contact : Rinse immediately with plenty of water. In case of doubt or persistent symptoms, consult always a physician.

On ingestion : Rinse mouth out with water. Do NOT induce vomiting. Get medical advice/attention.

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

Inhalation : The following symptoms may occur: Irritating to respiratory system.

Skin contact : The following symptoms may occur: Slight irritation, Prolonged or repeated skin contact may cause removal of natural fat from the skin resulting in dermatitis (skin inflammation).

Eyes contact : The following symptoms may occur: Slight irritation.

Ingestion : The following symptoms may occur: Nausea.

Chronic symptoms : Suspected of causing cancer.

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

Treat symptomatically.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : carbon dioxide (CO₂), powder, alcohol-resistant foam, water spray.
 Unsuitable extinguishing media : Strong water jet.

5.2. Special hazards arising from the substance or mixture

Specific hazards : Combustible. Not flammable. Heating will cause a rise in pressure with a risk of bursting.
 Hazardous decomposition products in case of fire : Carbon oxides (CO, CO₂). Sulphur oxides. Nitrogen oxides.

5.3. Advice for firefighters

Firefighting instructions : Evacuate area. Use water spray or fog for cooling exposed containers. Contain the extinguishing fluids by bunding. Prevent fire fighting water from entering the environment.
 Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus.
 Other information : Do not allow run-off from fire-fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

For non-emergency personnel : Evacuate unnecessary personnel. Keep upwind. Provide adequate ventilation. Wear recommended personal protective equipment. Concerning personal protective equipment to use, see section 8. Do not breathe vapours. Avoid contact with skin, eyes and clothing.

6.1.2. For emergency responders

For emergency responders : Ensure procedures and training for emergency decontamination and disposal are in place. Concerning personal protective equipment to use, see section 8.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Stop leak if safe to do so. Dam up the liquid spill. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. Recover large spills by pumping (use an explosion proof or hand pump). Place in a suitable container for disposal in accordance with the waste regulations (see Section 13). This material and its container must be disposed of in a safe way, and as per local legislation.

6.4. Reference to other sections

Concerning personal protective equipment to use, see section 8. Disposal: see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Provide adequate ventilation. Use personal protective equipment as required. Concerning personal protective equipment to use, see section 8. Do not breathe vapours. Avoid contact with skin, eyes and clothing. Take any precaution to avoid mixing with Incompatible materials, Refer to Section 10 on Incompatible Materials. Ensure proper process control to avoid excess waste discharge (temperature, concentration, pH, time). Avoid release to the environment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

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Hygiene measures : Keep good industrial hygiene. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product. Keep away from food, drink and animal feedingstuffs. Remove contaminated clothes. Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a dry, cool and well-ventilated place. Refer to the detailed list of incompatible materials in section 10 Stability/Reactivity. Bund storage facilities to prevent soil and water pollution in the event of spillage.

Incompatible substances or mixtures : Strong oxidizing agents.

Storage temperature : at room temperature

Heat and ignition sources : Keep away from open flames, hot surfaces and sources of ignition. Do not smoke.

Special rules on packaging : Keep in properly labelled containers.

Packaging materials : Keep only in the original container. Suitable material: Mild steel, Stainless steel. Unsuitable material: Synthetic material.

7.3. Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional information : Personal air monitoring ;. Room air monitoring. Monitoring methods

8.2. Exposure controls

Engineering measure(s) : Provide adequate ventilation. Organisational measures to prevent /limit releases, dispersion and exposure. Safe handling: see section 7 .

Personal protective equipment : The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hand protection : Chemical resistant gloves (according to European standard NF EN 374 or equivalent). Suitable material: NBR (Nitrile rubber). Breakthrough time : 8h. Thickness > 0.3mm. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Eye protection : Use suitable eye protection (EN166): Use splash goggles when eye contact due to splashing is possible

Body protection : Wear suitable protective clothing. Use chemically protective clothing

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. Half-face mask (DIN EN 140). full face mask (DIN EN 136). Filter type: A. The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used. (EN 137)

Thermal hazard protection : Not required for normal conditions of use. Use dedicated equipment.

Environmental exposure controls : Avoid release to the environment. Comply with applicable Community environmental protection legislation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Liquid.

Colour : No data available

Odour : No data available

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Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting / freezing point	: > 20 °C
Freezing point	: No data available
Initial boiling point and boiling range	: > 380 °C
Flash point	: 298 - 330 °C
Auto-ignition temperature	: > 380 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable, liquid
Vapour pressure	: < 0,01 kPa
Vapour density	: No data available
Relative density	: No data available
Density	: 0,96 - 1,02 g/cm ³
Solubility	: Water: No data available
Partition coefficient n-octanol/water	: No data available
Kinematic viscosity	: > 2000 mm ² /s (@ 40°C)
Dynamic viscosity	: No data available
Explosive properties	: Not applicable. The study does not need to be conducted because there are no chemical groups associated with explosive properties present in the molecule.
Oxidising properties	: Not applicable. The classification procedure needs not to be applied because there are no chemical groups present in the molecule which are associated with oxidising properties.
Explosive limits	: No data available

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reference to other sections 10.4 & 10.5.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Safe handling: see section 7.

10.5. Incompatible materials

Strong oxidizing agents. Safe handling: see section 7.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO₂). Sulphur oxides. Nitrogen oxides. Reference to other sections 5.2.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified (Based on available data, the classification criteria are not met.)

Bright Stock Extract (64742-10-5)	
LD50/oral/rat	> 5000 mg/kg
LD50/dermal/rabbit	> 3000 mg/kg

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Bright Stock Extract (64742-10-5)	
LC50/inhalation/4h/rat	> 5 mg/l/4h

Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met.) pH: No data available
Serious eye damage/irritation	: Not classified (Based on available data, the classification criteria are not met.) pH: No data available
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met.)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met.)
Carcinogenicity	: Suspected of causing cancer.
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met.)
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met.)
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met.)
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met.)

Bright Stock Extract (64742-10-5)	
Kinematic viscosity	> 2000 mm ² /s (@ 40°C)

Other information	: Symptoms related to the physical, chemical and toxicological characteristics. For further information see section 4.
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SECTION 12: Ecological information

12.1. Toxicity

Environmental properties	: According to the criteria of the European classification and labelling system, the substance/the product has not to be labelled as "dangerous for the environment".
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12.2. Persistence and degradability

Bright Stock Extract (64742-10-5)	
Persistence and degradability	No data available.

12.3. Bioaccumulative potential

Bright Stock Extract (64742-10-5)	
Partition coefficient n-octanol/water	No data available
Bioaccumulative potential	No data available.

12.4. Mobility in soil

Bright Stock Extract (64742-10-5)	
Mobility in soil	No data available

12.5. Results of PBT and vPvB assessment

Bright Stock Extract (64742-10-5)	
Results of PBT assessment	No data available

12.6. Other adverse effects

Other adverse effects	: No data available.
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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations	: Avoid release to the environment. Dispose of empty containers and wastes safely. Safe handling: see section 7. Refer to manufacturer/supplier for information on recovery/recycling. Recycling is preferred to disposal or incineration. If recycling is not possible, eliminate in accordance with local valid waste disposal regulations. Handle contaminated packages in the same way as the substance itself. Dispose of contaminated materials in accordance with current regulations.
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European waste catalogue (2001/573/EC, 75/442/EEC, 91/689/EEC) : This material and its container must be disposed of as hazardous waste
Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

14.6. Special precautions for user

Special precautions for user : No data available

- Overland transport

Not applicable

- Transport by sea

Not applicable

- Air transport

Not applicable

- Inland waterway transport

Not applicable

- Rail transport

Not applicable

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Code: IBC : No data available.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	Bright Stock Extract
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Bright Stock Extract is not on the REACH Candidate List

Bright Stock Extract is not on the REACH Annex XIV List

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15.1.2. National regulations

Germany

- VwVwS Annex reference : Water hazard class (WGK) 1, low hazard to waters (Classification according to VwVwS, Annex 1 or 2; ID No. 2003)
- 12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

- SZW-lijst van kankerverwekkende stoffen : Bright Stock Extract is listed
- SZW-lijst van mutagene stoffen : Bright Stock Extract is listed
- NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed
- NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : The substance is not listed
- NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed

Denmark

- Recommendations Danish Regulation : The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:

ABM = Algemene beoordelingsmethodiek
ADN = Accord Européen relatif au Transport International des Marchandises Dangereuses par voie de Navigation du Rhin
ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
CLP = Classification, Labelling and Packaging Regulation according to 1272/2008/EC
IATA = International Air Transport Association
IMDG = International Maritime Dangerous Goods Code
LEL = Lower Explosive Limit/Lower Explosion Limit
UEL = Upper Explosion Limit/Upper Explosive Limit
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
BTT = Breakthrough time :
DMEL = Derived Minimal Effect level
DNEL = Derived No Effect Level
EC50 = Median Effective Concentration
EL50 = Median effective level
ErC50 = EC50 in terms of reduction of growth rate
ErL50 = EL50 in terms of reduction of growth rate
EWC = European waste catalogue
LC50 = Median lethal concentration
LD50 = Median lethal dose
LL50 = Median lethal level
NA = Not applicable
NOEC = No observed effect concentration
NOEL: no-observed-effect level
NOELR = No observed effect loading rate
NOAEC = No observed adverse effect concentration
NOAEL = No observed adverse effect level

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	N.O.S. = Not Otherwise Specified
	OEL = Occupational Exposure Limits - Short Term Exposure Limits (STELs)
	PNEC = Predicted No-Effect Concentration
	Quantitative structure-activity relationship (QSAR)
	STOT = Specific Target Organ Toxicity
	TWA = time weighted average
	VOC = Volatile organic compounds (VOC) :
	WGK = Wassergefährungsklasse (Water Hazard Class under German Federal Water Management Act)

Sources of key data used to compile the datasheet : echa.europa.eu. Calculation method. Info supplier.

Training advice : Training staff on good practice.

Full text of H- and EUH-statements:

Carc. 2	Carcinogenicity, Category 2
H351	Suspected of causing cancer.

The contents and format of this SDS are in accordance with EEC Commission Directive 2015/830/EC, 1272/2008/EC and EEC Commission Regulation 1907/2006/EC (REACH) Annex II.

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