Tuf Tac LLR2 Blue

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 29/11/2022 Version: 1.0

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

1.1. Product identifier

Product form	:	Mixture
Product name	:	Lithium EP2 SV Blue
Product code	:	0251/0855
Type of product	:	Lubricants, greases, release products
Product group	:	End product

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

1.2.1. Relevant identified uses

Main use category	:	Industrial use,Professional use
Use of the substance/mixture	:	Lubricants and additives
Function or use category	:	Lubricants and additives

1.2.2. Uses advised against

Restrictions on use	:	No specific use advised against. Use only for intended applications

1.3. Details of the supplier of the safety data sheet

Manufacturer
Ironsides Lubricants Ltd
Shield Street
SK3 0DS Stockport – Cheshire
United Kingdom
T +44 (0)161 477 5858
enquiries@ironsideslubricants.co.uk -
https://www.ironsideslubricants.co.uk/

Only Representative
Intertek Deutschland GmbH
Strangenstrasse 1
70771 Leinfelden-Echterdingen
Germany
T +44 (0)161 2458070
ies21.reach@intertek.com

1.4. Emergency telephone number

Emergency number	:	+44 (0) 161 477 5858 Operating hours: Monday to Thursday 8:00 - 17:00 GMT Friday 8:00 - 12:30 GMT

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Not classified

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements

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

EUH-statements	:	EUH210 - Safety data sheet available on request.

2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

Component	
Distillates (petroleum), hydrotreated heavy naphthenic (64742-52-5)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Distillates (petroleum), hydrotreated heavy naphthenic (Main constituent) substance with national workplace exposure limit(s) (GB) (Note L)	CAS-No.: 64742-52-5 EC-No.: 265-155-0 EC Index-No.: 649-465-00-7 REACH-no: 01-2119467170-45	≥ 80	Not classified
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts	CAS-No.: 85940-28-9 EC-No.: 288-917-4	≥ 1 – < 3	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 2, H411

Note L : The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346 'Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions — Dimethyl sulphoxide extraction refractive index method', Institute of Petroleum, London. This note applies only to certain complex oil-derived substances in Part 3.
Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell.

First-aid measures after skin contact : Wash skin thoroughly with mild soap and water. Take off contaminated clothing and wash it before reuse. Seek medical attention if irritation develops.

First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth out with water. Get medical advice/attention if you feel unwell. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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

Symptoms/effects after inhalation : Inhalation of mists or vapours at elevated temperatures may cause respiratory irritation.

Symptoms/effects after skin contact : Prolonged or repeated contact may cause skin to become dry. Slight irritation. Cracking of the skin.

Symptoms/effects after eye contact : May cause slight irritation.

Symptoms/effects after ingestion : None under normal conditions. May cause irritation to the digestive tract. Ingestion may cause nausea and vomiting.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water fog. dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).
Unsuitable extinguishing media : Do not use a water jet since it may cause the fire to spread.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Will ignite if exposed to intensive heat.
Explosion hazard : Not expected to be a fire/explosion hazard under normal conditions of use. Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.
Reactivity in case of fire : Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other toxic gases.
Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon monoxide. Carbon dioxide. Nitrogen oxides (NOx) (as NO2). Sulfur oxides (SOx). Phosphorus oxides. Hydrogen sulphide. Metal oxides.

5.3. Advice for firefighters

Precautionary measures fire : Evacuate area.
Firefighting instructions : Eliminate all ignition sources if safe to do so. Use water spray or fog for cooling exposed containers.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Spill area may be slippery. Prevent soil and water pollution. Prevent entry to sewers and public waters.

6.1.1. For non-emergency personnel

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel. Avoid any direct contact with the product. Stop leaks if it can be done without personal risk. Eliminate all ignition sources if safe to do so.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : For a large spillage, contain the spillage by bunding.
Methods for cleaning up : Clear up spills immediately and dispose of waste safely. Sweep or shovel spills into appropriate container for disposal. This material and its container must be disposed of in a safe way, and as per local legislation. May be reused following decontamination. Clean contaminated surfaces with an excess of water.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For disposal of contaminated materials refer to section 13 : "Disposal considerations".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	:	Empty containers retain product residue and can be hazardous.
Precautions for safe handling	:	Wear personal protective equipment. For further information refer to section 8: "Exposure controls/personal protection". Avoid contact with eyes, skin and clothing. Do not ingest. Do not breathe fumes from fires or vapours from decomposition. Avoid breathing dust/fume/gas/mist/vapors/spray. Ensure good ventilation of the work station. Spilled material may present a slipping hazard. Clean spills promptly.
Hygiene measures	:	Routine housekeeping should be instituted. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	:	Store in a well-ventilated place. Keep cool. Store away from oxidising agents. Protect from sunlight. Store : Store in original container. Always keep in containers made of the same material as the supply container. do not store in unlabelled containers. Opened containers must be carefully closed and kept upright to avoid leakage. Empty containers should be taken for recycling, recovery or waste in accordance with local regulation. Empty containers retain product residue and can be hazardous.
Maximum storage period	:	5 year
Storage temperature	:	0 – 40 °C
Heat and ignition sources	:	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Information on mixed storage	:	Store away from strong oxidizers, strong bases, strong acids.
Storage area	:	Store at ambient temperature.
Special rules on packaging	:	Keep container tightly closed and dry.
Packaging materials	:	Suitable container materials. Mild steel. Certain plastic materials.

7.3. Specific end use(s)

Lubricants, greases, release agents.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Distillates (petroleum), hydrotreated heavy naphthenic (64742-52-5)	
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	1 mg/m³
WEL STEL (OEL STEL)	3 mg/m³

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:
Ensure good ventilation of the work station. Avoid spills. Do not walk on or roll equipment over spills.

8.2.2. Personal protection equipment

Personal protective equipment:
Eye protection should only be necessary where liquid could be splashed or sprayed. If the ventilation is suitable, it is not essential to wear respiratory equipment. Use barrier cream. Boots, gloves, goggles.

Personal protective equipment symbol(s):

8.2.2.1. Eye and face protection

Eye protection:
Safety glasses

Eye protection

Type	Field of application	Characteristics	Standard
Safety glasses, Safety goggles	Droplet, Dust, Fine dust	clear, With side shields	EN 166

8.2.2.2. Skin protection

Skin and body protection:
Wear suitable protective clothing

Hand protection:
Protective gloves

Hand protection

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	2 (> 30 minutes)	>0.09	2 (< 1.5)	EN ISO 374-1

8.2.2.3. Respiratory protection

Respiratory protection:
If the ventilation is suitable, it is not essential to wear respiratory equipment. In case of insufficient ventilation, wear suitable respiratory equipment

Respiratory protection

Device	Filter type	Condition	Standard
Respiratory protective device with a particle filter	Particle filter, Gas/vapour filter	Vapour protection	EN 143

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:
Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Tuf Tac LLR2 Blue

Colour	:	Blue.
Appearance	:	Paste.
Odour	:	almost odourless.
Odour threshold	:	Not available
Melting point	:	≥ 180 °C ASTM D2265
Freezing point	:	Not available
Boiling point	:	Not available
Flammability	:	Non flammable.
Explosive properties	:	Not considered to be explosive.
Explosive limits	:	Not applicable
Lower explosion limit	:	Not applicable
Upper explosion limit	:	Not applicable
Flash point	:	≥ 200 °C ASTM D93
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	Not available
pH	:	Not available
pH solution	:	Not available
Viscosity, kinematic	:	220 mm²/s @ 40°C. Major component
Solubility	:	Material insoluble in water.
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	Not available
Vapour pressure at 50°C	:	Not available
Density	:	Not available
Relative density	:	0.85 – 0.95 @ 25°C
Relative vapour density at 20°C	:	Not applicable
Particle size	:	Not available
Particle size distribution	:	Not available
Particle shape	:	Not available
Particle aspect ratio	:	Not available
Particle aggregation state	:	Not available
Particle agglomeration state	:	Not available
Particle specific surface area	:	Not available
Particle dustiness	:	Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity: No test data specifically related to reactivity available for this product or its ingredients.

10.2. Chemical stability

Stable at ambient temperature and under normal conditions of use.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Oxidizing agent.

10.6. Hazardous decomposition products

On heating or during combustion : May release : Carbon oxides (CO, CO2). Nitrogen oxides (NOx) (as NO2). Sulfur oxides (SOx). Hydrogen sulphide. Phosphorous oxide. Metal oxides.

SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Distillates (petroleum), hydrotreated heavy naphthenic (64742-52-5)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method)
LD50 dermal rabbit	> 5000 mg/kg
LC50 Inhalation - Rat (Dust/Mist)	> 5.53 mg/l/4h

Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts (85940-28-9)	
LD50 oral rat	3080 mg/kg bodyweight Animal: rat, Guideline: other:, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 2570 - 3700
LD50 dermal rabbit	> 20000 mg/kg bodyweight Animal: rabbit, Guideline: other:, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 2.3 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified

Distillates (petroleum), hydrotreated heavy naphthenic (64742-52-5)	
NOAEL (dermal, rat/rabbit)	> 2000 mg/kg bodyweight

STOT-repeated exposure : Not classified

Distillates (petroleum), hydrotreated heavy naphthenic (64742-52-5)	
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (dermal, rat/rabbit, 90 days)	= 1000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)

Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts (85940-28-9)	
NOAEL (oral, rat, 90 days)	125 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)

Aspiration hazard : Not classified

Lithium EP2 SV Blue	
Viscosity, kinematic	220 mm²/s @ 40°C. Major component

11.2. Information on other hazards

No additional information available

Tuf Tac LLR2 Blue

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

Not rapidly degradable

Distillates (petroleum), hydrotreated heavy naphthenic (64742-52-5)	
EL50, daphnia, acute	> 10000 mg/l (48 Hours)

Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts (85940-28-9)	
EC50 - Crustacea [1]	5.4 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	2.1 mg/l Test organisms (species): other:
EC50 72h - Algae [2]	2 mg/l Test organisms (species): other:
EC50 96h - Algae [1]	2.1 mg/l Test organisms (species): other:
EC50 96h - Algae [2]	2 mg/l Test organisms (species): other:

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Distillates (petroleum), hydrotreated heavy naphthenic (64742-52-5)	
Partition coefficient n-octanol/water (Log Pow)	2 – 6

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Recycle the material as far as possible. Recycle product or dispose safely. Recycle or dispose of in compliance with current legislation. Dispose of contents/container in accordance with licensed collector's sorting instructions. Assure that emissions are compliant with all applicable air pollution control regulations.

Sewage disposal recommendations : Disposal must be done according to official regulations.

Product/Packaging disposal recommendations : Recycle product or dispose safely. Recycle the material as far as possible. Recycle or dispose of in compliance with current legislation.

SECTION 14: Transport information

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

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

14.6. Special precautions for user

Overland transport
Not regulated

Transport by sea
Not regulated

Air transport
Not regulated

Inland waterway transport
Not regulated

Rail transport
Not regulated

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Abbreviations and acronyms:	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-statements:	
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
EUH210	Safety data sheet available on request.
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.
Skin Irrit. 2	Skin corrosion/irritation, Category 2

The classification complies with : ATP 12

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.