

SAFETY DATA SHEET

E.P.2Grease(EP2180)

According to Regulation (EC) No 1907/2006, Annex II, as amended. Commission Regulation (EU) No 2015/830 of 28 May 2015.

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

1.1. Product identifier EP2 Grease
Product name Mixture
Chemical name 0251/0295(EP2180)
Product number

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

Identified uses Lubricating grease.
Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier Derfal Limited
Northwest Business Park
Collooney
Co. Sligo
F91PPT0
Phone 0719130033

1.4. Emergency telephone number

Emergency telephone 0719130033

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified
Health hazards Not Classified
Environmental hazards Not Classified

2.2. Label elements

Hazard statements NC Not Classified

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

Lithium EP2

3.2. Mixtures

Distillates (petroleum), hydrotreated heavy naphthenic 70-100% CAS number: 64742-52-5 EC number: 265-155-0 REACH registration number: 01-2119467170-45-0000 Substance with National workplace exposure limits. IP 346 < 3%
Classification Not Classified
Phosphorodithioic acid, O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr)esters, zinc salts 1-2.5% CAS number: 85940-28-9 EC number: 288-917-4 REACH registration number: 01-2119521201-61-0000
Classification Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Aquatic Chronic 2 - H411
Calcium Carbonate <1% CAS number: 1317-65-3 EC number: 215-279-6 Substance with National workplace exposure limits.
Classification Not Classified
Asphalt, oxidized <1% CAS number: 64742-93-4 EC number: 265-196-4
Classification Not Classified

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	If in doubt, get medical attention promptly. Show this Safety Data Sheet to the medical personnel.
Inhalation	No specific recommendations. If throat irritation or coughing persists, proceed as follows. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if any discomfort continues.
Ingestion	No specific recommendations. If throat irritation or coughing persists, proceed as follows. Rinse mouth. Get medical attention if any discomfort continues.
Skin contact	No specific recommendations. Rinse with water. Get medical attention if any discomfort continues.

Lithium EP2

Eye contact Remove any contact lenses and open eyelids wide apart. Rinse with water. Get medical attention if any discomfort continues.

Protection of first aiders Use protective equipment appropriate for surrounding materials.

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

General information The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation No specific symptoms known.

Ingestion No specific symptoms known. May cause discomfort if swallowed.

Skin contact Prolonged contact may cause dryness of the skin.

Eye contact No specific symptoms known. May be slightly irritating to eyes.

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

Notes for the doctor Treat symptomatically.

Specific treatments No special treatment required.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards None known.

Hazardous combustion products Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours. Oxides of carbon. Oxides of nitrogen. Oxides of phosphorus. Oxides of sulphur.

5.3. Advice for firefighters

Protective actions during firefighting Avoid breathing fire gases or vapours. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions No specific recommendations. For personal protection, see Section 8.

6.2. Environmental precautions

Environmental precautions The product contains a substance which is toxic to aquatic organisms. Avoid discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Lithium EP2

Methods for cleaning up Reuse or recycle products wherever possible. Collect spillage with a shovel and broom, or similar and reuse, if possible. Collect and place in suitable waste disposal containers and seal securely. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dispose of contents/container in accordance with national regulations.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Keep container tightly sealed when not in use.

Advice on general occupational hygiene Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store away from incompatible materials (see Section 10). No specific recommendations.

Storage class Unspecified storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

Distillates (petroleum), hydrotreated heavy naphthenic

Short-term exposure limit (15-minute): WEL 10 mg/m³ mist

Calcium Carbonate

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust

Long-term exposure limit (8-hour TWA): WEL 4 mg/m³ respirable dust

Asphalt, oxidized

Long-term exposure limit (8-hour TWA): WEL 5 mg/m³ fume

Short-term exposure limit (15-minute): WEL 10 mg/m³ fume

WEL = Workplace Exposure Limit

8.2. Exposure controls

Appropriate engineering controls No specific ventilation requirements.

Eye/face protection No specific eye protection required during normal use. Large Spillages: Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible.

Hand protection No specific hand protection recommended. Large Spillages: Wear protective gloves.

Other skin and body protection Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.

Hygiene measures Wash after use and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product.

Lithium EP2

Respiratory protection No specific recommendations. Provide adequate ventilation. Large Spillages: If ventilation is inadequate, suitable respiratory protection must be worn.

Environmental exposure controls Not regarded as dangerous for the environment.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Grease.
Colour	Dark brown.
Odour	Almost odourless.
Odour threshold	No information available.
pH	Not applicable.
Melting point	>180°C
Initial boiling point and range	No information available.
Flash point	> 200°C Pensky-Martens closed cup. Information given is applicable to the major ingredient.
Evaporation rate	No information available.
Evaporation factor	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	No information available.
Other flammability	No information available.
Vapour pressure	No information available.
Vapour density	No information available.
Relative density	0.89 @ 25°C
Bulk density	No information available.
Solubility(ies)	Insoluble in water.
Partition coefficient	No information available.
Auto-ignition temperature	No information available.
Decomposition Temperature	No information available.
Viscosity	150 cSt @ 40°C Information given is applicable to the major ingredient.
Explosive properties	Not considered to be explosive.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Not available.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Lithium EP2

Reactivity	No test data specifically related to reactivity available for this product or its ingredients.
10.2. Chemical stability	
Stability	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.
10.3. Possibility of hazardous reactions	
Possibility of hazardous reactions	No potentially hazardous reactions known.
10.4. Conditions to avoid	
Conditions to avoid	Avoid excessive heat for prolonged periods of time.
10.5. Incompatible materials	
Materials to avoid	Avoid contact with the following materials: Strong oxidising agents.
10.6. Hazardous decomposition products	
Hazardous decomposition products	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours. Oxides of carbon. Oxides of nitrogen. Oxides of phosphorus. Oxides of sulphur.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects	Not regarded as a health hazard under current legislation.
Acute toxicity - oral	
Notes (oral LD₅₀)	Based on available data the classification criteria are not met.
Acute toxicity - dermal	
Notes (dermal LD₅₀)	Based on available data the classification criteria are not met.
Acute toxicity - inhalation	
Notes (inhalation LC₅₀)	Based on available data the classification criteria are not met.
Skin corrosion/irritation	
Animal data	Based on available data the classification criteria are not met.
Serious eye damage/irritation	
Serious eye damage/irritation	Based on available data the classification criteria are not met.
Respiratory sensitisation	
Respiratory sensitisation	Based on available data the classification criteria are not met.
Skin sensitisation	
Skin sensitisation	Based on available data the classification criteria are not met.
Germ cell mutagenicity	
Genotoxicity - in vitro	Based on available data the classification criteria are not met.
Carcinogenicity	
Carcinogenicity	Based on available data the classification criteria are not met.
IARC carcinogenicity	None of the ingredients are listed or exempt.
Reproductive toxicity	
Reproductive toxicity - fertility	Based on available data the classification criteria are not met.

Lithium EP2

Reproductive toxicity - development Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazard Not relevant. Solid.

General information No specific health hazards known. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation No specific symptoms known.

Ingestion No specific symptoms known. May cause discomfort if swallowed.

Skin contact Prolonged contact may cause dryness of the skin.

Eye contact No specific symptoms known. May be slightly irritating to eyes.

Route of exposure Ingestion Inhalation Skin and/or eye contact

Target organs No specific target organs known.

Toxicological information on ingredients.

Distillates (petroleum), hydrotreated heavy naphthenic

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ >5000 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ >5000 mg/kg, Dermal, Rat

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LC₅₀ >5.53 mg/l, 4 hours, Dust/Mist Rat

Skin corrosion/irritation

Skin corrosion/irritation Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation Not irritating.

Skin sensitisation

Skin sensitisation Not sensitising.

Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met.

Calcium Carbonate

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 5,000.0

Lithium EP2

Species	Rat
Notes (oral LD₅₀)	LD ₅₀ >5000 mg/kg, Oral, Rat
ATE oral (mg/kg)	5,000.0
<u>Acute toxicity - dermal</u>	
Notes (dermal LD₅₀)	LD ₅₀ >5000 mg/kg, Oral, Rat
<u>Skin corrosion/irritation</u>	
Skin corrosion/irritation	Not irritating.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Not irritating.
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	No data available.

SECTION 12: Ecological Information

Ecotoxicity Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

Toxicity Based on available data the classification criteria are not met.

Ecological information on ingredients.

Distillates (petroleum), hydrotreated heavy naphthenic

<u>Acute aquatic toxicity</u>	
Acute toxicity - fish	LL ₅₀ , 96 hours: >100 mg/l,
Acute toxicity - aquatic invertebrates	EC ₅₀ , 96 hours: >10000 mg/l,
Acute toxicity - aquatic plants	NOEC, 72 hours: >100 mg/l,
<u>Chronic aquatic toxicity</u>	
Chronic toxicity - aquatic invertebrates	NOEC, 21 days: 10 mg/l,

Phosphorodithioic acid, O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr)esters, zinc salts

<u>Acute aquatic toxicity</u>	
Acute toxicity - fish	LC ₅₀ , 96 hours: 4.5 mg/l, Oncorhynchus mykiss (Rainbow trout) NOEC, 96 hours: 1.8 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 5.4 mg/l, Daphnia magna NOEC, 48 hours: <1 mg/l, Daphnia magna
Acute toxicity - aquatic plants	LC ₅₀ , 96 hours: 2.1 mg/l, Scenedesmus subspicatus

Calcium Carbonate

Acute aquatic toxicity

Lithium EP2

Acute toxicity - fish	LC ₅₀ , 96 hours: >10000 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: >1000 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: >200 mg/l, Desmodosmus subspicatus

12.2. Persistence and degradability

Persistence and degradability The degradability of the product is not known.

Ecological information on ingredients.

Distillates (petroleum), hydrotreated heavy naphthenic

Biodegradation Inherently biodegradable.

Phosphorodithioic acid, O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr)esters, zinc salts

Persistence and degradability Not readily biodegradable.

Calcium Carbonate

Persistence and degradability The product contains only inorganic substances which are not biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient No information available.

Ecological information on ingredients.

Distillates (petroleum), hydrotreated heavy naphthenic

Bioaccumulative potential Bioaccumulation is unlikely to be significant because of the low water-solubility of this product.

Partition coefficient log Pow: 2 to 6

Calcium Carbonate

Partition coefficient Not applicable.

12.4. Mobility in soil

Mobility No data available.

Ecological information on ingredients.

Distillates (petroleum), hydrotreated heavy naphthenic

Mobility Mobile.

12.5. Results of PBT and vPvB assessment

Ecological information on ingredients.

Calcium Carbonate

Lithium EP2

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way.

Disposal methods Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste packaging should be collected for reuse or recycling. Incineration or landfill should only be considered when recycling is not feasible. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of the local water authority.

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

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

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information

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

National regulations Health and Safety at Work etc. Act 1974 (as amended).
The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].
EH40/2005 Workplace exposure limits.

Lithium EP2

EU legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

Commission Regulation (EU) No 2015/830 of 28 May 2015.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

Inventories

EU - EINECS/ELINCS

All the ingredients are listed or exempt.

Canada - DSL/NDSL

All the ingredients are listed or exempt.

US - TSCA

All the ingredients are listed or exempt.

Australia - AICS

All the ingredients are listed or exempt.

Japan - MITI

Phosphorodithioic acid, O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr)esters, zinc salts

Korea - KECI

All the ingredients are listed or exempt.

China - IECSC

All the ingredients are listed or exempt.

Philippines – PICCS

All the ingredients are listed or exempt.

New Zealand - NZIOC

All the ingredients are listed or exempt.

Taiwan - NECI

Phosphorodithioic acid, O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr)esters, zinc salts

SECTION 16: Other information

Lithium EP2

Abbreviations and acronyms used in the safety data sheet	ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways. RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail. IATA: International Air Transport Association. ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air. IMDG: International Maritime Dangerous Goods. CAS: Chemical Abstracts Service. ATE: Acute Toxicity Estimate. LC ₅₀ : Lethal Concentration to 50 % of a test population. LD ₅₀ : Lethal Dose to 50% of a test population (Median Lethal Dose). EC ₅₀ : 50% of maximal Effective Concentration. PBT: Persistent, Bioaccumulative and Toxic substance. vPvB: Very Persistent and Very Bioaccumulative.
Training advice	Only trained personnel should use this material.
Revision date	12/10/2020
Revision	6
Supersedes date	10/01/2019
SDS number	4598
Hazard statements in full	H315 Causes skin irritation. H319 Causes serious eye irritation. H411 Toxic to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.