

**Safety data sheet
according to UK REACH**

Printing date 11.10.2024

Version number 2 (replaces version 1)

Revision: 11.10.2024

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

- **Product identifier**
- **Trade name:** Clarke Lithium EP 2 Multi-Purpose Grease - 400g
- **Article number:** 3050875
- **Registration number** Mixture
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Product category** PC24 Lubricants, greases, release products
- **Application of the substance / the mixture** Lubricating grease.
- **Uses advised against** Processes involving extreme heat use advised against.

- **Details of the supplier of the safety data sheet**

Supplier:
Clarke International
Hennall Street
Epping
Essex
CM16 4LG
Tel: 0044 1992 565300

- **Further information obtainable from:** Product safety department.

- **Emergency telephone number:**

Members of the public seeking specific information on poisons should contact: In

England and Wales: NHS 111 - dial 111

In Scotland: NHS 24 - dial 111

*** SECTION 2: Hazards identification**

- **Classification of the substance or mixture**

Skin Sens. 1 H317 May cause an allergic skin reaction.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

- **Label elements**

- **Hazard pictograms**



GHS07

- **Signal word** Warning

- **Hazard-determining components of labelling:**

Naphthenic acids, zinc salts

- **Hazard statements**

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

- **Precautionary statements**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P273 Avoid release to the environment.

P280 Wear protective gloves.

P362+P364 Take off contaminated clothing and wash it before reuse.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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

*** SECTION 3: Composition/information on ingredients**

- **Mixtures**
- **Description:** A blend of highly refined mineral oils and multifunctional additives with thickener system.

• Dangerous components:

CAS: 12001-85-3 EINECS: 234-409-2 Reg.nr.: 01-2120783834-41-XXXX	Naphthenic acids, zinc salts ✖ Aquatic Chronic 2, H411; ⚠ Eye Irrit. 2, H319; Skin Sens. 1B, H317	1 – < 2.5%
CAS: 128-37-0 EINECS: 204-881-4 Reg.nr.: 01-2119555270-46-XXXX	2,6-Di-tert-butyl-p-cresol ✖ Aquatic Acute 1, H400; Aquatic Chronic 1, H410	0.1 – < 0.25%

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

*** SECTION 4: First aid measures**

- **Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
- **After eye contact:**
Check for and remove any contact lenses.
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**
Wash mouth out with water
Do not induce vomiting; call for medical help immediately.
If vomiting occurs spontaneously, keep head below hips to prevent aspiration.
- **Information for doctor:**
High pressure injection injuries of mineral and synthetic oils through the skin require prompt surgical intervention and possibly steroid therapy, to minimise tissue damage and loss of function. Because entry wounds are small and do not reflect the seriousness of the underlying damage, surgical exploration to determine the extent of involvement may be necessary. Local anaesthetics or hot soaks should be avoided because they can contribute to swelling, vasospasm and ischaemia. Prompt surgical decompression, debridement and evacuation of foreign material should be performed under general anaesthetics, and wide exploration is essential.
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.

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- Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

*** SECTION 5: Firefighting measures**

- Extinguishing media**
- Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Use fire extinguishing methods suitable to surrounding conditions.
- For safety reasons unsuitable extinguishing agents:** Water with full jet
- Special hazards arising from the substance or mixture**
Combustible
In case of fire, the following can be released:
Carbon monoxide (CO)
Nitrogen oxides (NO_x)
Sulphur Oxides (SO_x)
Toxic metal oxide smoke
- Advice for firefighters**
- Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.
Do not inhale explosion gases or combustion gases.
- Additional information**
Cool endangered receptacles with water spray.
Collect contaminated fire fighting water separately. It must not enter the sewage system.

*** SECTION 6: Accidental release measures**

- Personal precautions, protective equipment and emergency procedures**
Particular danger of slipping on leaked/spilled product.
Ensure adequate ventilation
- Environmental precautions:**
Do not allow to penetrate the ground/soil.
Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up:**
Pick up mechanically.
Send for recovery or disposal in suitable receptacles.
- Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

*** SECTION 7: Handling and storage**

- Precautions for safe handling**
Prevent formation of aerosols.
Ensure good ventilation/exhaustion at the workplace.

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- **Information about fire - and explosion protection:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
 - **Requirements to be met by storerooms and receptacles:** Prevent any seepage into the ground.
 - **Information about storage in one common storage facility:** Store away from oxidising agents.
 - **Further information about storage conditions:**
 - Store in cool, dry conditions in well sealed receptacles.
 - Store in a bunded area.
 - **Storage class:** 11
 - **Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**

CAS: 128-37-0 2,6-Di-tert-butyl-p-cresol

WEL	Long-term value: 10 mg/m ³
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- **DNELs**

CAS: 12001-85-3 Naphthenic acids, zinc salts

Oral	Long-term systemic effects	0.17 ng/kg bw/day (general population)
Dermal	Long-term systemic effects	1.7 mg/kg bw/day (general population)
		3.3 mg/kg bw/day (worker)
Inhalative	Long-term systemic effects	1.18 mg/m ³ (worker)
	Long-term systemic effects	290 µg/m ³ (general population)

CAS: 128-37-0 2,6-Di-tert-butyl-p-cresol

Oral	Long-term systemic effects	250 µg/kg bw/day (general population)
Dermal	Long-term systemic effects	250 µg/kg bw/day (general population)
		500 µg/kg bw/day (worker)
Inhalative	Long-term systemic effects	1.76 mg/m ³ (worker)
	Long-term systemic effects	435 µg/m ³ (general population)

- **PNECs**

CAS: 12001-85-3 Naphthenic acids, zinc salts

Freshwater	4 µg/L
Freshwater - Intermittent releases	40 µg/L
Marine water	400 ng/L
Marine Water - Intermittent releases	40 µg/L
Sewage Treatment Plant	689.7 µg/L
Sediment (freshwater)	15.1 – 19,438.4 µg/kg
Sediment (marine water)	1.51 – 1,943.84 µg/kg
Soil	0.6746 – 3.873 µg/kg

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CAS: 128-37-0 2,6-Di-tert-butyl-p-cresol

Freshwater	199 ng/L
Freshwater - Intermittent releases	1.99 µg/L
Marine water	19.9 ng/L
Sewage Treatment Plant	17 µg/L
Sediment (freshwater)	458.19 µg/kg
Sediment (marine water)	45.82 µg/kg
Soil	53.9 µg/kg
Secondary poisoning	16.67 mg/kg food

- **Additional information:** The lists valid during the making were used as basis.

- **Exposure controls**

- **Appropriate engineering controls** No further data; see section 7.

- **Individual protection measures, such as personal protective equipment**

- **General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Take note of assigned Workplace Exposure Limits.

Avoid contact with the eyes and skin.

Wash hands before breaks and at the end of work.

Do not eat, drink, smoke or sniff while working.

Do not carry product impregnated cleaning cloths in trouser pockets.

- **Respiratory protection:** Not necessary if room is well-ventilated.

- **Hand protection**



Protective gloves.

Use gloves tested and approved under appropriate government standards such as NIOSH (US) or EN374 (EU).

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

Nitrile rubber, NBR

Neoprene gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

Break-through time: > 480 minutes

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye/face protection**



Safety glasses with side-shields conforming to EN166.

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

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· Body protection:


Protective work clothing

Body protection must be chosen depending on product properties, activity and possible exposure.

· Environmental exposure controls Do not allow to enter drains, sewers or watercourses.

SECTION 9: Physical and chemical properties
· Information on basic physical and chemical properties
· General Information

Solid

· Physical state

Brown

· Colour:

Mineral-oil-like

· Odour:

Not determined.

· Odour threshold:

Undetermined.

· Melting point/freezing point:

Undetermined.

· Boiling point or initial boiling point and boiling range

> 100 °C

· Flash point:

> 250 °C

· Auto-ignition temperature:

Not applicable.

· Viscosity:

Not applicable.

· Kinematic viscosity

Not applicable.

· Dynamic:

Not applicable.

· Solubility

Not miscible or difficult to mix.

· water:

Not applicable.

· Vapour pressure:

 0.95 g/cm³
· Density and/or relative density
· Density at 20 °C:

NOTE: The physical data presented above are typical values and should not be construed as a specification.

· Other information

Pasty

· Appearance:
· Form:
· Important information on protection of health and environment, and on safety.

Product is not self-igniting.

· Ignition temperature:

Product does not present an explosion hazard.

· Explosive properties:
· Solvent content:

0.00 %

· VOC (EC)
· Information with regard to physical hazard classes
· Explosives

Void

· Flammable gases

Void

· Aerosols

Void

· Oxidising gases

Void

· Gases under pressure

Void

· Flammable liquids

Void

· Flammable solids

Void

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· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void

* SECTION 10: Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:**
Strong acids.
Strong bases.
Strong oxidising agents.
- **Hazardous decomposition products:**
Carbon monoxide and carbon dioxide
Nitrogen oxides (NOx)
Sulphur oxides (SOx)
Toxic metal oxide smoke

* SECTION 11: Toxicological information

- **Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

- **LD/LC50 values relevant for classification:**

Highly refined mineral oil**

Oral	LD50	> 2,000 mg/kg (rat)
Dermal	LD50	> 5,000 mg/kg (rabbit)
Inhalative	LC50/4 h	> 20 mg/l (rat)

CAS: 128-37-0 2,6-Di-tert-butyl-p-cresol

Oral	LD50	> 2,000 mg/kg (rat)
Dermal	LD50	> 2,000 mg/kg (rabbit)

- **Primary irritant effect:**

- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.

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- Respiratory or skin sensitisation**

May cause an allergic skin reaction.

- Germ cell mutagenicity** Based on available data, the classification criteria are not met.

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

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

- STOT-single exposure** Based on available data, the classification criteria are not met.

- STOT-repeated exposure** Based on available data, the classification criteria are not met.

- Aspiration hazard** Based on available data, the classification criteria are not met.

- Information on other hazards**

- Endocrine disrupting properties**

CAS: 128-37-0	2,6-Di-tert-butyl-p-cresol
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List II

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* SECTION 12: Ecological information

- Toxicity**

- Aquatic toxicity:**

CAS: 128-37-0	2,6-Di-tert-butyl-p-cresol
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EC50 (96 h)	0.386 mg/l (Bacteria)
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- Persistence and degradability** Not easily biodegradable

- Bioaccumulative potential** Contains components with the potential to bioaccumulate.

- Mobility in soil** No further relevant information available.

- Results of PBT and vPvB assessment**

- PBT:** Not applicable.

- vPvB:** Not applicable.

- Endocrine disrupting properties** For information on endocrine disrupting properties see section 11.

- Other adverse effects**

- Additional ecological information:**

- General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

* SECTION 13: Disposal considerations

- Waste treatment methods**

- Recommendation**

Recommended Hierarchy of Controls:

- Minimise waste;
- Reuse if not contaminated;
- Recycle, if possible; or
- Safe disposal (if all else fails).

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Contact waste processors for recycling information.

Used, degraded or contaminated product may be classified as hazardous waste. Anyone classifying hazardous waste and determining its fate must be qualified in accordance with state and international legislation.

Delivery of waste oil to officially authorised collectors only.

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· Uncleaned packaging:
· Recommendation:

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning. Disposal must be made according to official regulations.

Containers, even those that are "empty," may contain residues that can develop flammable and/or hazardous vapours upon heating. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers.

· Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information

· UN number or ID number	
· ADR/RID/ADN, ADN, IMDG, IATA	Not applicable
· UN proper shipping name	
· ADR/RID/ADN, ADN, IMDG, IATA	Not applicable
· Transport hazard class(es)	
· ADR/RID/ADN, ADN, IMDG, IATA	
· Class	Not applicable
· Packing group	
· ADR/RID/ADN, IMDG, IATA	Not applicable
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Not applicable.
· Maritime transport in bulk according to IMO instruments	Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	Not applicable

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SECTION 15: Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture
 · Poisons Act

· Regulated explosives precursors

None of the ingredients are listed.

· Regulated poisons

None of the ingredients are listed.

· Reportable explosives precursors

None of the ingredients are listed.

· Reportable poisons

None of the ingredients are listed.

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· GHS label elements

The product is classified and labelled according to the Globally Harmonised System (GHS).

· Hazard pictograms



GHS07

· Signal word Warning

· Hazard-determining components of labelling:

Naphthenic acids, zinc salts

· Hazard statements

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

· Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P273 Avoid release to the environment.

P280 Wear protective gloves.

P362+P364 Take off contaminated clothing and wash it before reuse.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· Directive 2012/18/EU

· Named dangerous substances - ANNEX I None of the ingredients are listed.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

This Safety Data Sheet is in compliance with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

· Relevant phrases

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

· Training hints

This product should only be handled by workers who have received sufficient training in the safe handling and use of chemical products.

· Department issuing SDS: Product safety department.

· Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

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VOC: Volatile Organic Compounds (USA, EU)

DNEL: Derived No-Effect Level (UK REACH)

PNEC: Predicted No-Effect Concentration (UK REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

ATE: Acute toxicity estimate values

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation – Category 1

Skin Sens. 1B: Skin sensitisation – Category 1B

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

*** Data compared to the previous version altered.**

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