

SAFETY DATA SHEET**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

| | |
|---------------------|------------------|
| Product name | Energrease L21 M |
| Product code | 401938-BE02 GBXX |
| SDS no. | 401938 |
| Product type | Grease |

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

| | |
|-------------------------------------|--|
| Use of the substance/mixture | Grease for automotive applications. For specific application advice see appropriate Technical Data Sheet or consult our company representative. |
|-------------------------------------|--|

1.3 Details of the supplier of the safety data sheet

| | |
|-----------------------|--|
| Supplier | BP Middle East Sheikh Zayed Road, 6th Floor City Tower II PO Box 1699 Dubai United Arab Emirates Phone +9714 3317999 |
| E-mail address | MSDSadvice@bp.com |

1.4 Emergency telephone number

| | |
|-----------------------------------|--|
| EMERGENCY TELEPHONE NUMBER | Carechem: +44 (0) 1235 239 671 (Arabic language 24/7) +44 (0) 1235 239 670 (English language 24/7) |
|-----------------------------------|--|

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture**

| | |
|---------------------------|---------|
| Product definition | Mixture |
|---------------------------|---------|

Classification according to Directive 1999/45/EC [DSD]

The product is not classified as dangerous according to Directive 1999/45/EC and its amendments.

See sections 11 and 12 for more detailed information on health effects and symptoms and environmental hazards.

2.2 Label elements

| | |
|---------------------|---|
| Risk phrases | This product is not classified according to EU legislation. |
|---------------------|---|

| | |
|-----------------------|-----------------|
| Safety phrases | Not applicable. |
|-----------------------|-----------------|

| | |
|------------------------------------|---|
| Supplemental label elements | Safety data sheet available for professional user on request. |
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Special packaging requirements

| | |
|--|-----------------|
| Containers to be fitted with child-resistant fastenings | Not applicable. |
|--|-----------------|

| | |
|----------------------------------|-----------------|
| Tactile warning of danger | Not applicable. |
|----------------------------------|-----------------|

2.3 Other hazards

| | |
|--|---|
| Other hazards which do not result in classification | Note: High Pressure Applications Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. See 'Notes to physician' under First-Aid Measures, Section 4 of this Safety Data Sheet. |
|--|---|

SECTION 3: Composition/information on ingredients

| | |
|--------------------------|---------|
| Substance/mixture | Mixture |
|--------------------------|---------|

Highly refined base oil (IP 346 DMSO extract < 3%). Soap. Proprietary performance additives.

Classification

| Product/ingredient name | Identifiers | % | 67/548/EEC | Regulation (EC) No. 1272/2008 [CLP] | Type |
|--------------------------------|----------------------------------|----------|-------------------|--|-------------|
| Alkaryl amine | EC: 270-128-1 CAS: 68411-46-1 | 0.25-2.5 | N; R51/53 | Aquatic Chronic 2, H411 | [1] |

See Section 16 for the full text of the R-phrases declared above.

See Section 16 for the full text of the H statements declared above.

Type

| | | | | | |
|---------------------|------------------|----------------------|------------------|---------------|----------------------------------|
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SECTION 3: Composition/information on ingredients

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

| | |
|-----------------------------------|--|
| Eye contact | In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention. |
| Skin contact | Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if irritation develops. |
| Inhalation | If inhaled, remove to fresh air. Get medical attention if symptoms appear. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. |
| Ingestion | Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. |
| Protection of first-aiders | No action shall be taken involving any personal risk or without suitable training. |

4.2 Most important symptoms and effects, both acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

4.3 Indication of any immediate medical attention and special treatment needed

| | |
|---------------------------|--|
| Notes to physician | In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. Treatment should in general be symptomatic and directed to relieving any effects. Note: High Pressure Applications Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. Injuries may not appear serious at first but within a few hours tissue becomes swollen, discoloured and extremely painful with extensive subcutaneous necrosis. Surgical exploration should be undertaken without delay. Thorough and extensive debridement of the wound and underlying tissue is necessary to minimise tissue loss and prevent or limit permanent damage. Note that high pressure may force the product considerable distances along tissue planes. |
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SECTION 5: Firefighting measures

5.1 Extinguishing media

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| Suitable extinguishing media | In case of fire, use water fog, alcohol resistant foam, dry chemical or carbon dioxide extinguisher or spray. |
| Unsuitable extinguishing media | Do not use water jet. |

5.2 Special hazards arising from the substance or mixture

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|--|--|
| Hazards from the substance or mixture | No specific fire or explosion hazard. |
| Hazardous combustion products | Combustion products may include the following: carbon oxides (CO, CO ₂) (carbon monoxide, carbon dioxide) nitrogen oxides (NO, NO ₂ etc.) |

5.3 Advice for firefighters

| | |
|---|---|
| Special precautions for fire-fighters | No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. |
| Special protective equipment for fire-fighters | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents. |

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

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| For non-emergency personnel | No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Floors may be slippery; use care to avoid falling. Put on appropriate personal protective equipment. |
| For emergency responders | If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". |

| | |
|--------------------------------------|---|
| 6.2 Environmental precautions | Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). |
|--------------------------------------|---|

6.3 Methods and materials for containment and cleaning up

| | |
|--------------------|---|
| Small spill | Move containers from spill area. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor. Use a tool to scoop up solid or absorbed material and place into appropriate labelled waste container. |
|--------------------|---|

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SECTION 6: Accidental release measures

| | |
|--|--|
| Large spill | Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labelled waste container. Avoid creating dusty conditions and prevent wind dispersal. If emergency personnel are unavailable, contain spilt material. Suction or scoop the spill into appropriate disposal or recycling vessels, then cover spill area with oil absorbent. Dispose of via a licensed waste disposal contractor. |
| 6.4 Reference to other sections | <p>See Section 1 for emergency contact information.</p> <p>See Section 5 for firefighting measures.</p> <p>See Section 8 for information on appropriate personal protective equipment.</p> <p>See Section 12 for environmental precautions.</p> <p>See Section 13 for additional waste treatment information.</p> |

SECTION 7: Handling and storage

7.1 Precautions for safe handling

| | |
|---|---|
| Protective measures | Put on appropriate personal protective equipment. Wash thoroughly after handling. |
| Advice on general occupational hygiene | Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. |
| 7.2 Conditions for safe storage, including any incompatibilities | Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). |
| Not suitable | Prolonged exposure to elevated temperature |

7.3 Specific end use(s)

| | |
|------------------------|---|
| Recommendations | See section 1.2 and Exposure scenarios in annex, if applicable. |
|------------------------|---|

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

| Product/ingredient name | Exposure limit values |
|--------------------------------|---|
| No exposure limit value known. | |
| ACGIH TLVs | ACGIH (United States). TWA: 5 mg/m ³ 8 hour(s). Form: Mineral oil, mist |
| Base oil - unspecified | For information and guidance, the ACGIH values are included. For further information on these please consult your supplier. |

Whilst specific OELs for certain components may be shown in this section, other components may be present in any mist, vapour or dust produced. Therefore, the specific OELs may not be applicable to the product as a whole and are provided for guidance only.

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be 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.

Derived No Effect Level

No DELs available.

Predicted No Effect Concentration

No PNEC available.

8.2 Exposure controls

Appropriate engineering controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective occupational exposure limits.
All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained.
Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards. The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location.

Respiratory protection

Respiratory protective equipment is not normally required where there is adequate natural or local exhaust ventilation to control exposure.
In case of insufficient ventilation, wear suitable respiratory equipment.
The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of

SECTION 8: Exposure controls/personal protection

| | |
|---|--|
| Eye/face protection | the working conditions. Safety glasses with side shields. |
| Skin protection | |
| Hand protection | Wear protective gloves if prolonged or repeated contact is likely. Wear chemical resistant gloves. Recommended: Nitrile gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions. |
| Skin and body | Use of protective clothing is good industrial practice. Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. |
| Personal protective equipment (Pictograms) |  |
| Environmental exposure controls | Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels. |

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

| | |
|---|---|
| Physical state | Grease |
| Colour | Black. |
| Odour | Oily. |
| Odour threshold | Not available. |
| pH | Not available. |
| Melting point/freezing point | 190°C (374°F) |
| Initial boiling point and boiling range | Not available. |
| Flash point | Closed cup: >230°C (>446°F) [Pensky-Martens.] |
| Evaporation rate | Not available. |
| Flammability (solid, gas) | Not available. |
| Upper/lower flammability or explosive limits | Not available. |
| Vapour pressure | Not available. |
| Vapour density | Not available. |
| Relative density | Not available. |
| Density | 930 kg/m ³ (0.93 g/cm ³) at 15°C |
| Solubility(ies) | insoluble in water. |
| Partition coefficient: n-octanol/water | >3 |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |
| Penetration Number (0.1 mm) | 265 to 295 at 25°C |
| Explosive properties | Not available. |
| Oxidising properties | Not available. |

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

| | |
|--|---|
| 10.1 Reactivity | No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information. |
| 10.2 Chemical stability | The product is stable. |
| 10.3 Possibility of hazardous reactions | Under normal conditions of storage and use, hazardous polymerisation will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. |
| 10.4 Conditions to avoid | Avoid all possible sources of ignition (spark or flame). |

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SECTION 10: Stability and reactivity

| | |
|--|--|
| 10.5 Incompatible materials | Reactive or incompatible with the following materials: oxidising materials. |
| 10.6 Hazardous decomposition products | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

SECTION 11: Toxicological information

11.1 Information on toxicological effects

| | |
|---|---|
| Information on the likely routes of exposure | Routes of entry anticipated:Dermal, Inhalation. |
|---|---|

Potential acute health effects

| | |
|---------------------|--|
| Inhalation | Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. |
| Ingestion | No known significant effects or critical hazards. |
| Skin contact | May cause skin dryness and irritation. |
| Eye contact | No known significant effects or critical hazards. |

Symptoms related to the physical, chemical and toxicological characteristics

| | |
|---------------------|--|
| Inhalation | No specific data. |
| Ingestion | No specific data. |
| Skin contact | Adverse symptoms may include the following: irritation dryness cracking |
| Eye contact | No specific data. |

Delayed and immediate effects and also chronic effects from short and long term exposure

| | |
|--------------------|---|
| Ingestion | Ingestion of large quantities may cause nausea and diarrhoea. |
| Eye contact | Potential risk of transient stinging or redness if accidental eye contact occurs. |

Potential chronic health effects

| | |
|------------------------------|--|
| General | Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. |
| Carcinogenicity | No known significant effects or critical hazards. |
| Mutagenicity | No known significant effects or critical hazards. |
| Developmental effects | No known significant effects or critical hazards. |
| Fertility effects | No known significant effects or critical hazards. |

SECTION 12: Ecological information

12.1 Toxicity

| | |
|------------------------------|-----------------------------|
| Environmental hazards | Not classified as dangerous |
|------------------------------|-----------------------------|

12.2 Persistence and degradability

Biodegradable

12.3 Bioaccumulative potential

This product is not expected to bioaccumulate through food chains in the environment.

12.4 Mobility in soil

| | |
|---|---|
| Soil/water partition coefficient (K_{oc}) | Not available. |
| Mobility | Spillages are unlikely to penetrate the soil. |

12.5 Results of PBT and vPvB assessment

| | |
|-------------|-----------------|
| PBT | Not applicable. |
| vPvB | Not applicable. |

12.6 Other adverse effects

| | |
|-------------------------------------|---|
| Other ecological information | If released to water the product will sink. |
|-------------------------------------|---|

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

| | |
|----------------------------|---|
| Methods of disposal | The generation of waste should be avoided or minimised wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. |
|----------------------------|---|

| | |
|------------------------|------|
| Hazardous waste | Yes. |
|------------------------|------|

European waste catalogue (EWC)

| Waste code | Waste designation |
|------------|--------------------------------|
| 13 08 99* | wastes not otherwise specified |

SECTION 13: Disposal considerations

However, deviation from the intended use and/or the presence of any potential contaminants may require an alternative waste disposal code to be assigned by the end user.

Packaging

Methods of disposal Dispose of via an authorised person/ licensed waste disposal contractor in accordance with local regulations. Recycle, if possible.

Special precautions

This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

| | ADR/RID | ADN/ADNR | IMDG | IATA |
|--|----------------|----------------|----------------|----------------|
| 14.1 UN number | Not regulated. | Not regulated. | Not regulated. | Not regulated. |
| 14.2 UN proper shipping name | - | - | - | - |
| 14.3 Transport hazard class(es) | - | - | - | - |
| 14.4 Packing group | - | - | - | - |
| 14.5 Environmental hazards | No. | No. | No. | No. |
| 14.6 Special precautions for user | Not available. | Not available. | Not available. | Not available. |
| Additional information | - | - | - | - |

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

[Annex XIV - List of substances subject to authorisation](#)

[Substances of very high concern](#)

None of the components are listed.

[Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles](#)

[Other regulations](#)

| | |
|--|---|
| REACH Status | The company, as identified in Section 1, sells this product in the EU in compliance with the current requirements of REACH. |
| United States inventory (TSCA 8b) | All components are listed or exempted. |
| Australia inventory (AICS) | All components are listed or exempted. |
| Canada inventory | All components are listed or exempted. |
| China inventory (IECSC) | All components are listed or exempted. |
| Japan inventory (ENCS) | All components are listed or exempted. |
| Korea inventory (KECI) | All components are listed or exempted. |
| Philippines inventory (PICCS) | All components are listed or exempted. |

15.2 Chemical Safety Assessment

This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

Abbreviations and acronyms

ADN/ADNR = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
 ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
 ATE = Acute Toxicity Estimate
 BCF = Bioconcentration Factor
 CAS = Chemical Abstracts Service
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
 CSA = Chemical Safety Assessment
 CSR = Chemical Safety Report
 DMEL = Derived Minimal Effect Level
 DNEL = Derived No Effect Level
 DPD = Dangerous Preparations Directive [1999/45/EC]
 DSD = Dangerous Substances Directive [67/548/EEC]
 EINECS = European Inventory of Existing Commercial chemical Substances

SECTION 16: Other information

ES = Exposure Scenario
 EUH statement = CLP-specific Hazard statement
 EWC = European Waste Catalogue
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 OECD = Organisation for Economic Co-operation and Development
 PBT = Persistent, Bioaccumulative and Toxic
 PNEC = Predicted No Effect Concentration
 RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
 RRN = REACH Registration Number
 SADT = Self-Accelerating Decomposition Temperature
 SVHC = Substances of Very High Concern
 STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
 STOT-SE = Specific Target Organ Toxicity - Single Exposure
 TWA = Time weighted average
 UN = United Nations
 UVCB = Complex hydrocarbon substance
 VOC = Volatile Organic Compound
 vPvB = Very Persistent and Very Bioaccumulative

Full text of abbreviated H statements H411 Toxic to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS] Aquatic Chronic 2, H411 AQUATIC TOXICITY (CHRONIC) - Category 2

Full text of abbreviated R phrases R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Full text of classifications [DSD/DPD] N - Dangerous for the environment

History

Date of issue/ Date of revision 26/05/2011.

Date of previous issue 26/05/2011.

Prepared by Product Stewardship

 Indicates information that has changed from previously issued version.

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from BP Group.

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