SAFETY DATA SHEET

Castrol Mine Grease

Section 1. Identification

Product name Castrol Mine Grease

Product code 468507-IN07

SDS # 468507

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

Product type Grease

Supplier Castrol New Zealand Limited
Level 2 - 105 Carlton Gore Road
Newmarket
Auckland, New Zealand

www.castrol.com/nz
Technical Helpline 0800 10 40 60

Emergency telephone number 0800 243643 (0800 CHEMHELP) (NZ use only)

New Zealand National Poisons Centre 0800 764 766 National Poison Centre

Section 2. Hazards identification

HSNO Classification REPRODUCTIVE TOXICITY - Category 2
LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3

This material is classified as hazardous according to criteria in the Hazardous Substances (Hazard Classification) Notice 2020.

This material is not classified as DANGEROUS GOODS according to criteria in New Zealand Standard 5433:2012 Transport of Dangerous Goods on Land.

GHS label elements

Signal word Warning

Hazard statements Suspected of damaging fertility or the unborn child.
Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing, eye protection, face protection, or hearing protection. Avoid release to the environment.

Response IF exposed or concerned: Get medical attention.

Storage Store locked up.

Disposal Dispose of contents and container in accordance with all local, regional, national and international regulations.

Symbol

Other hazards which do not result in classification Defatting to the skin.
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 2. Hazards identification

Defatting to the skin.

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%). Thickening agent. Proprietary performance additives.

Ingredient name	% (w/w)	CAS number
Residual oils (petroleum), solvent-dewaxed	≥30 - ≤60	CAS: 64742-62-7
Distillates (petroleum), hydrotreated heavy naphthenic	≥10 - ≤30	CAS: 64742-52-5
Molybdenum disulphide	≤5	CAS: 1317-33-5
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts	≤3	CAS: 85940-28-9
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	≤0.3	CAS: 68411-46-1

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

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

Section 4. First aid measures

Description of necessary first aid measures

Inhalation If inhaled, remove to fresh air. Get medical attention.

Ingestion Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Get medical attention.

Skin contact In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention. If skin irritation or rash occurs: Get medical attention.

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.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician 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.

Protection of first-aiders No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Section 5. Firefighting measures

Extinguishing media

Suitable
In case of fire, use water fog, alcohol resistant foam, dry chemical or carbon dioxide extinguisher or spray.

Not suitable
Do not use water jet.

Specific hazards arising from the chemical
Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. This material is harmful to aquatic life with long lasting effects.

Hazardous combustion products
Combustion products may include the following:
metal oxide/oxides
carbon oxides (CO, CO_2) (carbon monoxide, carbon dioxide)
sulphur oxides (SO, SO_2, etc.)

Hazchem code
Not available.

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 positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel
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".

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".

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). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and material 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.

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. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container.

Section 7. Handling and storage

Precautions for safe handling
Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Avoid contact of spilt material and runoff with soil and surface waterways.

Section 7. Handling and storage

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep away from heat and direct sunlight. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/containers designed for use with this product. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Not suitable

Prolonged exposure to elevated temperature

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Residual oils (petroleum), solvent-dewaxed	**HSWA 2015 - HSW (GRWM) 2016. Workplace exposure standards (WES) (New Zealand) [Oil mineral]** WES-TWA 8 hours: 5 mg/m³. Form: Mist. Issued/Revised: 6/2016. WES-STEL 15 minutes: 10 mg/m³. Form: Mist. Issued/Revised: 9/2010.
Distillates (petroleum), hydrotreated heavy naphthenic	**HSWA 2015 - HSW (GRWM) 2016. Workplace exposure standards (WES) (New Zealand) [Oil mineral]** WES-TWA 8 hours: 5 mg/m³. Form: Mist. Issued/Revised: 6/2016. WES-STEL 15 minutes: 10 mg/m³. Form: Mist. Issued/Revised: 9/2010.
Molybdenum disulphide	**HSWA 2015 - HSW (GRWM) 2016. Workplace exposure standards (WES) (New Zealand) [molybdenum: insoluble compounds]** WES-TWA 8 hours: 10 mg/m³ (measured as Mo). Issued/Revised: 9/2010.

Biological exposure indices

No exposure indices known.

Recommended monitoring procedures

Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Appropriate engineering controls

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.
Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits.
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.

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.

Individual protection measures

Section 8. Exposure controls/personal protection

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. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye protection Safety glasses with side shields.

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 protection Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection 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 the working conditions.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state Grease

Colour Black. [Dark]

Odour Not available.

pH Not applicable.

Melting point/freezing point Not available.

Boiling point or initial boiling point and boiling range Not available.

Drop Point >175 °C

Flash point Closed cup: >181°C (>357.8°F) [Pensky-Martens ASTM D 93]

Auto-ignition temperature Not applicable.

Flammability Not available.

Vapour pressure Not available.

Ingredient name	Vapour Pressure at 20˚C			Vapour pressure at 50˚C		
	mm Hg	kPa	Method	mm Hg	kPa	Method

Relative vapour density Not applicable.

Density <1000 kg/m³ (<1 g/cm³) at 15°C

Solubility(ies)

Media	Result
water	Not soluble

Particle characteristics

Median particle size Not available.

Section 10. Stability and reactivity

Chemical stability	The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerisation will not occur.
Conditions to avoid	Avoid all possible sources of ignition (spark or flame).
Incompatible materials	Reactive or incompatible with the following materials: oxidising materials.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on likely routes of exposure

Inhalation	No known significant effects or critical hazards.
Ingestion	No known significant effects or critical hazards.
Skin contact	Defatting to the skin. 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	Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
Skin contact	Adverse symptoms may include the following: irritation dryness cracking reduced foetal weight increase in foetal deaths skeletal malformations
Eye contact	No specific data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result
Phosphorodithioic acid, mixed O,O-bis (2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts	**Rat - Oral - LD50** 3080 mg/kg OECD 401 **Rabbit - Dermal - LD50** >20000 mg/kg OECD 402
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	**Rat - Oral - LC50** >5000 mg/kg OECD 401 **Rat - Dermal - LC50** >2000 mg/kg OECD 402

Skin corrosion/irritation

Product/ingredient name	Result

Phosphorodithioic acid, mixed O,O-bis (2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts	**Rabbit - Skin - Irritant** OECD 404
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	**Rabbit - Skin - Slightly irritating to the skin.** OECD 404

Serious eye damage/eye irritation

Product/ingredient name	Result
Phosphorodithioic acid, mixed O,O-bis (2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts	**Rabbit - Eyes - Irritant** OECD 405
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	**Rabbit - Eyes - Not irritant** OECD 405

Respiratory corrosion/irritation

Not available.

Respiratory or skin sensitization

Product/ingredient name	Result
Phosphorodithioic acid, mixed O,O-bis (2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts	**Guinea pig - skin** OECD 406 Result: Not sensitising
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	**Guinea pig - skin** OECD 406 Result: Not sensitising

Potential chronic health effects

General	No known significant effects or critical hazards.
Inhalation	Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.
Ingestion	Ingestion of large quantities may cause nausea and diarrhoea.
Skin contact	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
Eye contact	No known significant effects or critical hazards.
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	Suspected of damaging fertility.

Chronic toxicity

Not available.

Conclusion/Summary[Product] Not available.

Carcinogenicity

Not available.

Germ cell mutagenicity

Section 11. Toxicological information

Product/ingredient name	Result
Phosphorodithioic acid, mixed O,O-bis (2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts	**In vitro - Bacteria** OECD 471 Result: Negative **In vitro - Mammalian-Animal** OECD 473 Result: Negative **In vitro - Mammalian-Animal** OECD 476 Result: Negative **In vivo - Mammalian-Animal** OECD 474 Result: Negative
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	**In vitro - Bacteria** OECD 471 Result: Negative **In vitro - Mammalian-Animal** OECD 487 Result: Negative **In vitro - Mammalian-Animal** OECD 476 Result: Negative

Reproductive toxicity

Product/ingredient name	Result
Phosphorodithioic acid, mixed O,O-bis (2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts	**Rat - Oral** OECD 421 Maternal toxicity: Negative Fertility effects: Negative Developmental: Negative
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	**Rat - Oral** OECD 443 Maternal toxicity: Negative Fertility effects: Positive Developmental: Negative

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts	2500	N/A	N/A	N/A	N/A

Section 12. Ecological information

Ecotoxicity This material is harmful to aquatic life with long lasting effects.

Aquatic and terrestrial toxicity

Product/ingredient name	Result
Phosphorodithioic acid, mixed O,O-bis (2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts	**Acute - ErL50** OECD 201 Algae 2.1 mg/l [96 hours] **Acute - EL50** OECD 202 Daphnia 5.4 mg/l [48 hours] **Acute - LL50** OECD 203 Fish 4.5 mg/l [96 hours] **Chronic - NOEL** OECD 201 Algae 1 mg/l [96 hours] **Chronic - NOEL** OECD 211 Daphnia 0.4 mg/l [21 days]
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	**Acute - ErC50** OECD 201 Algae >100 mg/l [72 hours] **Acute - EC50** OECD 202 Daphnia 51 mg/l [48 hours] **Acute - LC50** OECD 203 Fish >100 mg/l [96 hours] **Chronic - EC10** OECD 211 Daphnia 1.69 mg/l [21 days] **Chronic - NOEC** OECD 201 Algae ≥10 mg/l [72 hours]

Persistence and degradability

Not expected to be rapidly degradable.

Product/ingredient name	Result
Phosphorodithioic acid, mixed O,O-bis (2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts	OECD 301B 1.5% [28 days] - Not readily
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	OECD 301B 1% [28 days]

Bioaccumulative potential

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

Section 12. Ecological information

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	5.1	-	High

Mobility in soil

Mobility Spillages are unlikely to penetrate the soil.

Soil/water partition coefficient Not available.

Other ecological information This product is unlikely to disperse in water.

Section 13. Disposal considerations

Disposal methods 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. 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

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
New Zealand Class	Not regulated.	-	-	-		-
ADG Class	Not regulated.	-	-	-		-
IATA Class	Not regulated.	-	-	-		-
IMDG Class	Not regulated.	-	-	-		-

PG* : Packing group

Section 15. Regulatory information

New Zealand Regulatory Information

HSNO Approval Number HSR002606

HSNO Group Standard Lubricants, Lubricant Additives, Coolants and Anti-freeze Agents (Subsidiary Hazard) Group Standard 2020

HSNO Classification REPRODUCTIVE TOXICITY - Category 2
LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3

Regulation according to other foreign laws

REACH Status For the REACH status of this product please consult your company contact, as identified in Section 1.

United States inventory (TSCA 8b) Not determined.

Australia inventory (AIIC) All components are listed or exempted.

Canada inventory status All components are listed or exempted.

China inventory (IECSC) At least one component is not listed.

Japan inventory (CSCL) At least one component is not listed.

Section 15. Regulatory information

Korea inventory (KECI)	All components are listed or exempted.
Philippines inventory (PICCS)	All components are listed or exempted.
Taiwan Chemical Substances Inventory (TCSI)	Not determined.

Section 16. Other information

History

Date of issue/Date of revision	3 February 2026
Date of previous issue	18 August 2023.
Version	4
Prepared by	Not available.
Key to abbreviations	Varies = may contain one or more of the following 64741-88-4, 64741-89-5, 64741-95-3, 64741-96-4, 64742-01-4, 64742-44-5, 64742-45-6, 64742-52-5, 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-57-0, 64742-58-1, 64742-62-7, 64742-63-8, 64742-65-0, 64742-70-7, 72623-85-9, 72623-86-0, 72623-87-1

Notice to reader

Indicates information that has changed from previously issued version.

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.

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