SAFETY DATA SHEET



Alpha SP 100

Section 1. Identification

Product name Alpha SP 100
Product code 456553-AU24
SDS no. 456553

Use of the substance/mixture Gear lubricant

For specific application advice see appropriate Technical Data Sheet or consult our

company representative.

Product type Liquid.

Supplier Castrol New Zealand Limited

73 Remuera 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 Not classified.

This material is not 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.

Routes of entry Dermal contact. Eye contact. Inhalation.

GHS label elements

Signal word No signal word.

Hazard statements No known significant effects or critical hazards.

Precautionary statements

Prevention
Response
Storage
Disposal
Other hazards which do not
Not applicable.
Not applicable.
Not applicable.
Defatting to the skin.

Section 3. Composition/information on ingredients

Substance/mixture

result in classification

Mixture

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

Ingredient name	% (w/w)	CAS number
Distillates (petroleum), hydrotreated heavy paraffinic	≥30 - ≤60	64742-54-7
Distillates (petroleum), solvent-dewaxed heavy paraffinic	≥30 - ≤60	64742-65-0

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.

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Section 4. First aid measures

Description of necessary first aid measures

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

Ingestion Do not induce vomiting unless directed to do so by medical personnel. Get medical

attention if symptoms occur.

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 symptoms occur.

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. **Protection of first-aiders** No action shall be taken involving any personal risk or without suitable training.

Section 5. Firefighting measures

Extinguishing media

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

Not suitable Do not use water jet.

Swarf fires - Neat metal working oils may fume, thermally decompose or ignite if Specific hazards arising they come into contact with red hot swarf. To minimise the generation of red hot from the chemical

swarf ensure that a sufficient flow of oil is correctly directed to the cutting edge of the tool to flood it throughout cutting operations. As an additional precaution swarf should be regularly cleared from the immediate area to prevent the risk of fire. In a

fire or if heated, a pressure increase will occur and the container may burst.

Hazardous combustion

products

Combustion products may include the following:

metal oxide/oxides

carbon oxides (CO, CO₂) (carbon monoxide, carbon dioxide)

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).

Methods and material for containment and cleaning up

Small spill Stop leak if without risk. Move containers from spill area. Absorb with an inert

material and place in an appropriate waste disposal container. Dispose of via a

licensed waste disposal contractor.

Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, Large spill

water courses, basements or confined areas. Contain and collect spillage with noncombustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a

licensed waste disposal contractor.

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Section 7. Handling and storage

Precautions for safe handling

Put on appropriate personal protective equipment (see Section 8). Concentrations of mist, fumes and vapours in enclosed spaces may result in the formation of explosive atmospheres. Excessive splashing, agitation or heating must be avoided. During metal working, solid particles from workpieces or tools will contaminate the fluid and may cause abrasions of the skin. Where such abrasions result in a penetration of the skin, first aid treatment should be applied as soon as reasonably possible. The presence of certain metals in the workpiece or tool, such as chromium, cobalt and nickel, can contaminate the metalworking fluid, as can bacteria, and as a result may induce allergic and other skin reactions, especially if personal hygiene is inadequate.

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. 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
Distillates (petroleum), hydrotreated heavy paraffinic	NZ HSWA 2015 - GRWM 2016 (New Zealand). [Oil mineral] WES-TWA: 5 mg/m³ 8 hours. Issued/ Revised: 6/2016 Form: Mist WES-STEL: 10 mg/m³ 15 minutes. Issued/ Revised: 9/2010 Form: Mist
Distillates (petroleum), solvent-dewaxed heavy paraffinic	NZ HSWA 2015 - GRWM 2016 (New Zealand). [Oil mineral] WES-TWA: 5 mg/m³ 8 hours. Issued/ Revised: 6/2016 Form: Mist WES-STEL: 10 mg/m³ 15 minutes. Issued/ Revised: 9/2010 Form: Mist

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.

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Section 8. Exposure controls/personal protection

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. 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.

For protection against metal working fluids, respiratory protection that is classified as "resistant to oil" (class R) or oil proof (class P) should be selected where appropriate. Depending on the level of airborne contaminants, an air-purifying, half-mask respirator (with HEPA filter) including disposable (P- or R-series) (for oil mists less than 50mg/m3), or any powered, air-purifying respirator equipped with hood or

helmet and HEPA filter (for oil mists less than 125 mg/m3).

Where organic vapours are a potential hazard during metalworking operations, a

combination particulate and organic vapour filter may be necessary.

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 Liquid.

Colour Brown. [Light]

Odour Mild

PH Not applicable.
 Melting point/freezing point
 Boiling point, initial boiling point, and boiling range
 Not available.
 Not available.

Drop Point Not available.

Flash point Closed cup: 195°C (383°F) [Pensky-Martens ASTM D 93]

Open cup: >200°C (>392°F) [Cleveland ASTM D 92]

Auto-ignition temperature

Vapour pressure

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Not available.

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Section 9. Physical and chemical properties

	Vapour Pressure at 20°C		Vapour pressure at 50°C			
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
Distillates (petroleum), hydrotreated heavy paraffinic	<0.08	<0.011	ASTM D 5191			
Distillates (petroleum), solvent-dewaxed heavy paraffinic	<0.08	<0.011	ASTM D 5191			

Relative vapour density

Not available.

Density

<1000 kg/m³ (<1 g/cm³) at 15°C

Solubility(ies)

Media	Result
water	Not soluble

Viscosity

Kinematic: 100 mm²/s (100 cSt) at 40°C

Kinematic: 11.1 mm²/s (11.1 cSt) at 100°C (ASTM D 445)

Particle characteristics

Median particle size Not applicable.

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

Under normal conditions of storage and use, hazardous decomposition products

products should not be produced.

Section 11. Toxicological information

Information on likely routes of exposure

Inhalation Vapour inhalation under ambient conditions is not normally a problem due to low

vapour pressure.

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

InhalationNo specific data.IngestionNo specific data.

Skin contact Adverse symptoms may include the following:

irritation dryness cracking

Eye contact No specific data.

Potential chronic health effects

General No known significant effects or critical hazards.

Inhalation Overexposure to the inhalation of airborne droplets or aerosols may cause irritation

of the respiratory tract.

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.

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Section 11. Toxicological information

CarcinogenicityNo known significant effects or critical hazards.MutagenicityNo known significant effects or critical hazards.TeratogenicityNo known significant effects or critical hazards.Developmental effectsNo known significant effects or critical hazards.Fertility effectsNo known significant effects or critical hazards.

Section 12. Ecological information

Ecotoxicity

No known significant effects or critical hazards.

Persistence and degradability

Expected to be biodegradable.

Bioaccumulative potential

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

Mobility in soil

Mobility

Spillages may penetrate the soil causing ground water contamination.

Soil/water partition coefficient (Koc)

Not available.

Other ecological information

Spills may form a film on water surfaces causing physical damage to organisms.

Oxygen transfer could also be impaired.

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. 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

HSNO Group Standard

HSNO Classification

None assigned.

Not classified.

Regulation according to other foreign laws

REACH StatusFor the REACH status of this product please consult your company contact, as

identified in Section 1.

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Section 15. Regulatory information

United States inventory All components are active or exempted.

(TSCA 8b)

Australia inventory (AIIC) All components are listed or exempted. **Canada inventory status** All components are listed or exempted. China inventory (IECSC) All components are listed or exempted. Japan inventory (CSCL) All components are listed or exempted. Korea inventory (KECI) All components are listed or exempted. All components are listed or exempted.

Philippines inventory

(PICCS)

Taiwan Chemical All components are listed or exempted.

Substances Inventory (TCSI)

Section 16. Other information

History

Date of issue/Date of 16 August 2023

revision

Date of previous issue 13 February 2023.

Version 3.01

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.

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