SAFETY DATA SHEET



Alphasyn T 220

Section 1. Identification

Product name Alphasyn T 220
Product code 451121-FR01
SDS no. 451121

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 BP Oil New Zealand Limited Ground floor and 1st floor

Watercare House 73 Remuera Road Newmarket Auckland

Auckland New Zealand

Phone 09 969 9300

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

New Zealand National Poisons

Centre

0800 764 766 National Poison Centre

OTHER PRODUCT INFORMATION

Technical Helpline 0800 10 40 60

Section 2. Hazards identification

HSNO Classification 6.8 - REPRODUCTIVE AND DEVELOPMENTAL TOXICITY (Fertility) - Category B

6.8 - REPRODUCTIVE AND DEVELOPMENTAL TOXICITY (Unborn child) -

Category B

9.1 - AQUATIC ECOTOXICITY - Category C

This material is classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001 and has been classified according to the Hazardous Substances (Classifications) Regulations 2001.

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 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. Use personal protective equipment as required.

Avoid release to the environment.

Response IF exposed or concerned: Get medical advice/attention.

Storage Store locked up.

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

and international regulations.

Symbol



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Section 2. Hazards identification

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 3. Composition/information on ingredients

Substance/mixture

∕lixture

Synthetic base stock. Proprietary performance additives.

Ingredient name	%	CAS number
tris(methylphenyl)phosphate	1 - 5	1330-78-5
n-phenyl-1-naphthylamine	0.1 - 1	90-30-2
9-Octadecenoic acid (Z)-, reaction products with 3-(dodecenyl)dihydro- 2,5-furandione and triethylenetetramine	0.1 - 1	68478-81-9

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 symptoms occur.

Eye contact In case of contact, immediately flush eyes with plenty of water for at least 15

minutes. Check for and remove any contact lenses. Eyelids should be held away

from the eyeball to ensure thorough rinsing. Get medical attention.

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

Notes to physicianTreatment 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-aidersNo 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 Use foam or all-purpose dry chemical to extinguish.

Not suitable Do not use water jet.

Specific hazards arising In a fire or if heated, a p This material is harmful

In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

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Section 5. Firefighting measures

Hazardous combustion

products

Combustion products may include the following:

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

phosphorus oxides

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 appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

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. Avoid breathing vapour or mist. Provide adequate ventilation. Put on appropriate personal protective equipment (see Section 8). Contact emergency personnel.

For emergency responders

Entry into a confined space or poorly ventilated area contaminated with vapour, mist or fume is extremely hazardous without the correct respiratory protective equipment and a safe system of work. Wear self-contained breathing apparatus. Wear a suitable chemical protective suit. Chemical resistant boots. 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. Collect spillage.

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.

Large spill

Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Contaminated absorbent material may pose the same hazard as the spilt product. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling

Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not ingest. Avoid exposure - obtain special instructions before use. Avoid breathing vapour or mist. Avoid exposure during pregnancy. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Avoid release to the environment. Wash thoroughly after handling. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Remove contaminated clothing and protective equipment before entering eating areas. Workers should wash hands and face before eating, drinking and smoking. 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. See also Section 8 for additional information on hygiene measures.

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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. 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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

No exposure limit value known.

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

Appropriate engineering controls

Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations 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.

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

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 Hand protection Safety glasses with side shields.

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

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.

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Section 8. Exposure controls/personal protection

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. Respiratory protection should conform to AS/NZS 1715 and AS/NZS 1716.

Section 9. Physical and chemical properties

Appearance

Physical state Liquid.

Colour Yellow. [Light]
Odour Not available.
pH Not available.
Melting point Not available.
Boiling point Not available.
Drop Point Not available.

Flash point Closed cup: >210°C (>410°F) [Pensky-Martens.]

Vapour pressure Not available.
Vapour density Not available.

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

Solubility insoluble in water.

Viscosity

Kinematic: 220 mm²/s (220 cSt) at 40°C

Kinematic: 23.9 mm²/s (23.9 cSt) at 100°C

Section 10. Stability and reactivity

Chemical stability The product is stable.

Possibility of hazardous Under normal conditions of storage and use, hazardous reactions will not occur.

reactions Under normal conditions of storage and use, hazardous polymerisation will not

order normal containing of storage and acc, nazaraous polymensation will n

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

InhalationNo known significant effects or critical hazards.IngestionNo 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 Adverse symptoms may include the following:

reduced foetal weight increase in foetal deaths skeletal malformations

Ingestion Adverse symptoms may include the following:

reduced foetal weight increase in foetal deaths skeletal malformations

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Section 11. Toxicological information

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.

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 Potential risk of transient stinging or redness if accidental eye contact occurs.

CarcinogenicityNo known significant effects or critical hazards.MutagenicityNo known significant effects or critical hazards.TeratogenicitySuspected of damaging the unborn child.Developmental effectsNo known significant effects or critical hazards.

Fertility effects Suspected of damaging fertility.

Section 12. Ecological information

Ecotoxicity

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

Persistence and degradability

Not expected to be rapidly degradable.

Bioaccumulative potential

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

Product/ingredient name	LogPow	BCF	Potential
1 ()) /	5.93 4.28		high high

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. 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. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. 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.

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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 HSR0002606

HSNO Group StandardLubricants, Lubricant Additives, Coolants and Anti-freeze Agents (Subsidiary

Hazard) Group Standard 2006

HSNO Classification 6.8 - REPRODUCTIVE AND DEVELOPMENTAL TOXICITY (Fertility) - Category B

6.8 - REPRODUCTIVE AND DEVELOPMENTAL TOXICITY (Unborn child) -

Category B

9.1 - AQUATIC ECOTOXICITY - Category C

Regulation according to other foreign laws

REACH StatusThe 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 active or exempted.

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

NDSL.

China inventory (IECSC)

Japan inventory (ENCS)

Korea inventory (KECI)

All components are listed or exempted.

All components are listed or exempted.

At least one component is not listed.

Philippines inventory

(PICCS)

All components are listed or exempted.

Taiwan Chemical All components are listed or exempted.

Substances Inventory (TCSI)

Section 16. Other information

History

Date of issue/Date of

30 October 2019

revision

Date of previous issue No previous validation.

Version

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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Section 16. Other information

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.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken. You can contact the BP Group to ensure that this document is the most current available. Alteration of this document is strictly prohibited.

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