SAFETY DATA SHEET

According to Brazilian standard ABNT NBR 14725

SDS # : 083649

CARTER EP 320

Date of the previous version: not applicable **Revision Date:** *2015-05-30* **Version** *2*

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product name CARTER EP 320

Other means of identification

Product Code(s) 083649

Number 191
Substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Identified uses Gear oil. mineral.

Uses advised against Do not use for any purpose other than the one for which it is intended.

Details of the supplier of the safety data sheet

Supplier
Total Lubricants of Brazil
Av. Tobias Salgado, 45
Pindamonhangaba-SP, CEP: 12412770
Tel: +55 11 3054 8160
Fax: +55 11 3054 8161

Contact Point Technical/ HSEQ
E-mail Address emergencia@totalbr.com.br

Emergency telephone number
Emergency telephone +(55) 12 3644 4600

2. HAZARDS IDENTIFICATION

Classification

Skin sensitization - Category 1
Acute aquatic toxicity - Category 2
Chronic aquatic toxicity - Category 3

Label elements

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Signal Word
WARNING

Hazard Statements
H412 - Harmful to aquatic life with long lasting effects
H317 - May cause an allergic skin reaction
H401 - Toxic to aquatic life

Precautionary Statements
P261 - Avoid breathing dust/fume/gas/mist/vapours/ spray
P272 - Contaminated work clothing should not be allowed out of the workplace
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P302 + P352 - IF ON SKIN: Wash with plenty of water/soap
P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention
P321 - Specific treatment (see supplemental first aid instructions on this label)
P362 + P364 - Take off contaminated clothing and wash it before reuse
P273 - Avoid release to the environment
P501 - Dispose of contents/ container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
• Not applicable

Other information
Physical-Chemical Properties Contaminated surfaces will be extremely slippery.

Environmental properties Should not be released into the environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Chemical Name	EC-No	CAS-No	Weight %	Classification (ABNT NBR 14725-2)
Polysulfides, di-tert-butyl	273-103-3	68937-96-2	<1	Skin Sens. 1 (H317) Aquatic Chronic 4 (H413)

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Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14- tert-alkyl	931-384-6	^	<1	Acute Tox. 4 (H302) Aquatic Chronic 2 (H411) Eye Dam. 1 (H318) Flam. Liq. 3 (H226) Skin Sens. 1 (H317)
(Z)-octadec-9-enylamine	204-015-5	112-90-3	<1	Acute Tox. 4 (H302) Skin Corr. 1B (H314) Asp. Tox. 1 (H304) Eye Dam. 1 (H318) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) STOT SE 3 (H335) STOT RE 2 (H373)

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

First aid measures for different exposure routes

General advice IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.

Eye contact Rinse thoroughly with plenty of water, also under the eyelids.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. Allergic symptoms may develop within 12 hours after exposure. In the case of skin irritation or allergic reactions see a physician.

Inhalation Inhalation of high concentrations of vapor or aerosols may cause irritation of the upper respiratory tract.

Ingestion Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.

Most important symptoms/effects, acute and delayed

Skin contact May cause an allergic skin reaction.

Eye contact Not classified.

Inhalation Not classified. Inhalation of vapors in high concentration may cause irritation of respiratory system.

Ingestion Not classified. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

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

Notes to physician Treat symptomatically.

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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Carbon dioxide (CO_2). ABC powder. Foam. Water spray or fog.

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire.

Special Hazard Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentration.

Protective Equipment and Precautions for Firefighters Wear self-contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

General Information Do not touch or walk through spilled material. Contaminated surfaces will be extremely slippery. Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition.

Advice for emergency responders Use personal protective equipment. For personal protection see section 8.

Environmental precautions

General Information Do not allow material to contaminate ground water system. Try to prevent the material from entering drains or water courses. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up

Methods for cleaning up Dam up. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling When using, do not eat, drink or smoke. For personal protection see section 8. Use only in well-ventilated areas. Do not breathe vapors or spray mist. Avoid contact with skin, eyes and clothing.

Prevention of fire and explosion Take precautionary measures against static discharges: Ground/bond containers, tanks and transfer/receiving equipment.

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Hygiene measures

Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and at the end of workday. Do not use abrasives, solvents or fuels. Do not dry hands with rags that have been contaminated with product. Do not put product contaminated rags into workwear pockets.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions

Keep away from food, drink and animal feedingstuffs. Keep in a bunded area. Keep container tightly closed. Keep preferably in the original container. Otherwise reproduce all indication of the regulation label on the new container. Do not remove the hazard labels of the containers (even if they are empty). Design the installations in order to avoid accidental emissions of product (due to seal breakage, for example) onto hot casings or electrical contacts. Protect from frost, heat and sunlight. Protect from moisture.

Materials to Avoid

Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits

Mineral oil mist:
USA: OSHA (PEL) TWA 5 mg/m^3, NIOSH (REL) TWA 5 mg/m^3, STEL 10 mg/m^3, ACGIH (TLV) TWA 5 mg/m^3 (highly refined).

Legend

See section 16.

Exposure controls

Engineering Measures

Apply technical measures to comply with the occupational exposure limits. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

Individual protection measures, such as personal protective equipment

General Information

Protective engineering solutions should be implemented and in use before personal protective equipment is considered. If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers.

Eye/Face Protection

If splashes are likely to occur, wear:. Safety glasses with side-shields.

Skin and body protection

Wear suitable protective clothing. Protective shoes or boots.

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Hand Protection	Hydrocarbon-proof gloves. Fluorinated rubber. Nitrile rubber. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Appearance		limpid	
Color		brown	
Physical State @20°C		liquid	
Odor		Characteristic	
Odor Threshold		No information available	
Property	**Values**	**Remarks**	**Method**
pH		Not applicable	
Melting point/range		No information available	
Boiling point/boiling range		Not applicable	
Flash point	**220 - 238 °C**		ASTM D 92
	428 - 460 °F		ASTM D 92.
Evaporation rate		No information available	
Flammability Limits in Air		No information available	
upper	-	No information available	
Lower	-	No information available	
Vapor Pressure		No information available	
Vapor density		No information available	
Relative density	0.895 - 0.907	@ 20 °C	ASTM D 4052
Density	895 - 907 kg/m³	@ 20 °C	ASTM D 4052
Water solubility		Insoluble	
Solubility in other solvents		No information available	
logPow		No information available	
Autoignition temperature	**> 250 °C**	Not applicable	ASTM E 659
	> 482 °F		ASTM E 659
Decomposition temperature		No information available	
Viscosity, kinematic	320 mm2/s	@ 40 °C	ASTM D 445
	26.12 mm2/s	@ 100 °C	ASTM D 445
Explosive properties	Not explosive		
Oxidizing Properties	Not applicable		
Possibility of hazardous reactions	Not applicable		
Other information			
Freezing Point		No information available	
Pour point	-10 °C		ASTM D 97

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10. STABILITY AND REACTIVITY

Reactivity None under normal processing.

Chemical stability Stable under recommended storage conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to Avoid Heat (temperatures above flash point), sparks, ignition points, flames, static electricity.

Incompatible Materials Strong oxidizing agents.

Hazardous Decomposition Products Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Information on likely routes of exposure

Principle Routes of Exposure Skin contact, Eye contact, Inhalation, Ingestion.

Product Information Product does not present an acute toxicity hazard based on known or supplied information.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity

.0135 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity

Component Information .

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Polysulfides, di-tert-butyl 68937-96-2	= 6500 mg/kg (Rat)		
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14- tert-alkyl ^	LD50 2000 mg/kg bw (Rat - OECD TG 401)		-
(Z)-octadec-9-enylamine 112-90-3	LD50 1689 mg/kg (Rat)	LD50 > 2000 mg/kg (Rat)	

Information on toxicological effects

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Symptoms .

Skin contact May cause an allergic skin reaction.

Eye contact Not classified.

Inhalation Not classified. Inhalation of vapors in high concentration may cause irritation of respiratory system.

Ingestion Not classified. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

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

Skin corrosion/irritation Not classified.
Serious eye damage/eye irritation Not classified.
Sensitization May cause an allergic skin reaction.
Germ Cell Mutagenicity This product is not classified as mutagenic.
Carcinogenicity This product is not classified carcinogenic.

Reproductive toxicity No information available.
STOT-single exposure No information available.
STOT - repeated exposure No information available.
Aspiration Hazard Not classified.

12. ECOLOGICAL INFORMATION

Ecotoxicity
Toxic to aquatic life Harmful to aquatic life with long lasting effects

Acute aquatic toxicity - Product Information

No experimental data available

Acute aquatic toxicity - Component Information

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates	Toxicity to microorganisms
Polysulfides, di-tert-butyl 68937-96-2		LC50 (96h) 250-500 mg/L Pimephales promelas (static) LC50 (96h) > 1000 mg/L Pimephales promelas (semi-static)	EC50 (48h) > 1000 mg/L Daphnia magna	

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Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14- tert-alkyl ^	EL50 (96h) > 15 mg (Selenastrum capricornutum - OECD 201) EC50 (96h) 6.4 mg/l (Pseudokirchnerella subcapitata - OECD 201) EC50 (96h) 15 mg/l (Pseudokirchnerella subcapitata - OECD 201) EC50 (96h) 6.4 mg/L (Selenastrum capricornutum- OECD TG 201) (ECHA CHEM)	LL50 (96h) ca. 24 mg/l (Oncorhynchus mykiss - OECD 203)	EL50 (48h) ca. 91.4 mg/l (Daphnia magna - OECD 202)	
(Z)-octadec-9-enylamine 112-90-3	EC50 (96h) 0.03 mg/l (Algae)	LC50 (96h) 0.11 mg/l (Fish)	EC50 (48h) 0.011 mg/l (Daphnia magna)	

Chronic aquatic toxicity - Product Information

No experimental data available

Chronic aquatic toxicity - Component Information

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates	Toxicity to fish	Toxicity to microorganisms
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14- tert-alkyl ^	NOEC (96h) 1.7 mg/l (Pseudokirchnerella subcapitata - OECD 201) par NOEC (96h) 3.3 mg/l (Pseudokirchnerella subcapitata - OECD 201)	EL50 (21d) 0.91 mg/l (Daphnia magna - OECD 211) NOEL (21d) 0.12 mg/l (Daphnia magna - OECD 211) EL50 (21d) 0.66 mg/l (Daphnia magna - OECD 211)	-	EC50 (3h) ca. 2433 mg/L (Activated Sludge, domestic - OECD TG 209) (ECHA CHEM)

Effects on terrestrial organisms No experimental data available .

Persistence and degradability

General Information No information available.

Bioaccumulative potential

Product Information No information available.

logPow No information available

Component Information .

Chemical Name	log Pow

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Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14- tert-alkyl ^	< 0.30 to >7.10 (OECD TG 117) (ECHA CHEM)

Mobility

Soil Given its physical and chemical characteristics, the product generally shows low soil mobility

Air Loss by evaporation is limited

Water The product is insoluble and floats on water

Other adverse effects

Ozone-Depleting Substances This product does not contain substances that deplete the Ozone Layer; according to CONAMA Resolution No. 267/2000.

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste Disposal Methods Should not be released into the environment. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. After use, this oil must be sent to a licensed waste oil facility. Incorrect disposal of used oil poses a risk to the environment. Mixture with other waste types such as solvents, brake- and cooling liquids is forbidden.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

DOT Not regulated

TDG Not regulated

MEX Not regulated

ICAO/IATA Not regulated

IMDG/IMO Not regulated

ADR/RID Not regulated

ADN Not regulated

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15. REGULATORY INFORMATION

Ordinance No. 229 of May 24, 2011/MTE - Safety Signs
Decree 2.657 of July 3rd, 1998 - Safe Use of Chemicals at Workplace
Law 9.605 of February 12, 1998 - Criminal and administrative sanctions derived from conduct and activities harmful to the environment, and other measures
Law 6.514 of December 22, 1977 on Workplace Safety and Health
Law No. 8.078 - Consumer Protection Code

16. OTHER INFORMATION

Full text of H-Statements referred to under section 3
H302 - Harmful if swallowed
H314 - Causes severe skin burns and eye damage
H304 - May be fatal if swallowed and enters airways
H318 - Causes serious eye damage
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects
H335 - May cause respiratory irritation
H373 - May cause damage to organs through prolonged or repeated exposure if inhaled
H317 - May cause an allergic skin reaction
H413 - May cause long lasting harmful effects to aquatic life
H411 - Toxic to aquatic life with long lasting effects
H226 - Flammable liquid and vapor

Abbreviations, acronyms

Legend Section 8
TWA: Time Weight Average
STEL: Short Time Exposure Limit

*	Skin designation

Revision Date: 2015-05-30
Revision Note *** Indicates updated section

This safety data sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of knowledge at the date indicated above.It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk.The information given herein in no way dispenses the user from knowing and applying all provisions regulating his activity.The user bears sole liability for the precautions required when using the product.The regulatory texts indicated herein are intended to aid the user to fulfil his obligations. This list is not to be considered complete and exhaustive.It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned.

End of Chemical Product Safety Data Sheet