SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

SDS # : 33482

CARTER EP 100

Date of the previous version: 2017-10-31 **Revision Date:** 2018-12-04 **Version** 8

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name **CARTER EP 100**
Number 186
Substance/mixture Mixture

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

Identified uses Lubricant, Industrial gear oil.

1.3. Details of the supplier of the safety data sheet

Supplier

A - TOTAL UK LIMITED
183 Eversholt St, Kings Cross
London, NW1 1BU
UNITED KINGDOM
Tel: +44 (0)20 7339 8000
Fax: +44 (0)20 7339 8033

B - TOTAL LUBRIFIANTS
562 Avenue du Parc de L'ile
92029 Nanterre Cedex
FRANCE
Tél: +33 (0)1 41 35 40 00
Fax: +33 (0)1 41 35 84 71***

For further information, please contact:

Contact Point A - HSE

B - HSE***

E-mail Address A - rm.gb-msds@total.co.uk

B - rm.msds-lubs@total.com***

1.4. Emergency telephone number

Emergency telephone: +44 1235 239670

UK: National Poisons Information Service (NPIS): NHS on 111 or a doctor

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

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REGULATION (EC) No 1272/2008 ***
*For the full text of the H-Statements mentioned in this Section, see Section 2.2.****

Classification
The product is classified as dangerous in accordance with Regulation (EC) No. 1272/2008***
Chronic aquatic toxicity - Category 3*** - (H412)***

2.2. Label elements

Labelled according to REGULATION (EC) No 1272/2008***

Signal word
None***

Hazard Statements ***
H412 - Harmful to aquatic life with long lasting effects***

Precautionary statements
P273 - Avoid release to the environment
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable***

Supplemental Hazard Statements
***

EUH208 - Contains . May produce an allergic reaction***

2.3. Other hazards

Physical-Chemical Properties Contaminated surfaces will be extremely slippery.***

Environmental properties The product may form an oil film on the water surface that may stop the oxygen exchange.***

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixture***

Chemical nature Mineral oil of petroleum origin.***
Hazardous components ***

Chemical Name	EC-No	REACH Registration Number	CAS-No	Weight %	Classification (Reg. 1272/2008)
2,6-di-tert-butylphenol***	204-884-0***	01-2119490822-33	128-39-2	0.1-<0.25	Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) Skin Irrit. 2 (H315) Acute M factor = 1
(Z)-octadec-9-enylamine***	204-015-5***	no data available	112-90-3	0.01-<0.025	Acute Tox. 4 (H302) Skin Corr. 1B (H314) Asp. Tox. 1 (H304)

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					Eye Dam. 1 (H318) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) STOT SE 3 (H335) STOT RE 2 (H373) Acute M factor = 10 Chronic M factor = 10

Additional information Product containing mineral oil with less than 3% DMSO extract as measured by IP 346.***

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

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

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

Eye contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing.***

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. High pressure jets may cause skin damage. Take victim immediately to hospital.***

Inhalation Remove casualty to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration.***

Ingestion Clean mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or poison control centre immediately.***

Protection of first-aiders First aider needs to protect himself. See Section 8 for more detail. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.***

4.2. Most important symptoms and effects, both acute and delayed

Eye contact Not classified based on available data.***

Skin contact Not classified based on available data. May produce an allergic reaction. High pressure injection of the products under the skin may have very serious consequences even though no symptom or injury may be apparent.***

Inhalation Not classified based on available data. Inhalation of vapours in high concentration may cause irritation of respiratory system.***

Ingestion Not classified based on available data. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.***

4.3. Indication of any immediate medical attention and special treatment needed

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Notes to physician Treat symptomatically.***

Section 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

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.

5.2. Special hazards arising from the substance or mixture

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. Combustion products include sulphur oxides (SO2 and SO3) and Hydrogen sulphide H2S, Mercaptans, Nitrogen oxides (NOx), Phosphorous oxides, Silicon dioxide.***

5.3. Precautions for fire-fighters

Special protective equipment for fire-fighters Wear self-contained breathing apparatus and protective suit.***

Other information Cool containers / tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. 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.***

6.2. Environmental precautions

General Information Do not allow material to contaminate ground water system. Prevent entry into waterways, sewers, basements or confined areas. Local authorities should be advised if significant spillages cannot be contained.***

6.3. Methods and material for containment and cleaning up

Methods for containment Dike to collect large liquid spills. If necessary dike the product with dry earth, sand or similar non-combustible materials.***

Methods for cleaning up Dispose of contents/container in accordance with local regulation. In case of soil contamination, remove contaminated soil for remediation or disposal, in accordance with local regulations.***

6.4. Reference to other sections

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Personal protective equipment See Section 8 for more detail.

Waste treatment See section 13.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling For personal protection see section 8. Use only in well-ventilated areas. Do not breathe vapours or spray mist. Avoid contact with skin, eyes and clothing.***

Prevention of fire and explosion Take precautionary measures against static discharges.***

Hygiene measures Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product. Provide regular cleaning of equipment, work area and clothing. 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.***

7.2. 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. Preferably keep in the original container. Otherwise, reproduce all the statutory information from the labels onto 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. Store at room temperature. Protect from moisture.***

Materials to avoid Strong oxidising agents.***

7.3. Specific use(s)

Specific use(s) Please refer to Technical Data Sheet for further information.***

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parametres

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

Derived No Effect Level (DNEL) ***

DNEL Worker (Industrial/Professional)***

Chemical Name	Short term, systemic	Short term, local effects	Long term, systemic	Long term, local effects

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	effects		effects	
2,6-di-tert-butylphenol*** 128-39-2			2.77 mg/kg bw/day Dermal 19.6 mg/m³ Inhalation	

DNEL Consumer***

Chemical Name	Short term, systemic effects	Short term, local effects	Long term, systemic effects	Long term, local effects
2,6-di-tert-butylphenol*** 128-39-2			1.67 mg/kg bw/day Oral 5.8 mg/m³ Inhalation	

Predicted No Effect Concentration (PNEC) ***

Chemical Name	Water	Sediment	Soil	Air	STP	Oral
2,6-di-tert-butylphenol*** 128-39-2	0.00045 mg/l fw 0.000045 mg/l mw 0.0045 mg//l or	0.196 mg/kg dw fw 0.0196 mg/kg dw mw	0.0389 mg/kg dw		10 mg/l	

8.2. Exposure controls

Occupational Exposure Controls

Engineering measures

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

Personal protective equipment

General Information

Protective engineering solutions should be implemented and in use before personal protective equipment is considered. The personal protective equipment (PPE) recommendations apply to the product AS DELIVERED. In case of mixtures or formulations, it is suggested that you contact the relevant PPE suppliers.***

Respiratory protection

None under normal use conditions. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Respirator with combination filter for vapour/particulate (EN 14387). Type A/P1. Warning ! filters have a limited use duration. If exposure limits are exceeded a self-contained breathing apparatus has to be worn. The use of breathing apparatus must comply strictly with the manufacturer's instructions and the regulations governing their choices and uses.***

Eye protection

If splashes are likely to occur, wear:. Safety glasses with side-shields. EN 166.***

Skin and body protection

Wear suitable protective clothing. Protective shoes or boots. Long sleeved clothing. Type 4/6.***

Hand protection

Hydrocarbon-proof gloves. Fluorinated rubber. Nitrile rubber. In case of prolonged contact with the product, it is recommended to wear gloves complying with EN 420 and EN 374 standards, protecting at least for 480 minutes and having a thickness of 0,38 mm at least. These values are indicative only. The level of protection is provided by the material of the glove, its technical characteristics, its resistance to the chemicals to be handled, the appropriateness of its use and its replacement frequency. 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

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used, such as the danger of cuts, abrasion, and the contact time.***

Environmental exposure controls

General Information The product should not be allowed to enter drains, water courses or the soil.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance		Clear***	
Colour		yellow to amber***	
Physical state @20°C		liquid***	
Odour		characteristic***	
Odour Threshold		No information available	
Property	**Values**	**Remarks**	**Method**
pH		Not applicable***	
Melting point/range		Not applicable***	
Boiling point/boiling range		No information available***	
Flash point ***	**242*** °C*****		ISO 2592***
	468*** °F***		ISO 2592***
Evapouration rate		No information available***	
Flammability Limits in Air		***	
Upper ***		No information available***	***
Lower ***		No information available***	***
Vapour pressure ***	***	No information available***	***
Vapour density ***	***	No information available***	***
Relative density ***	*** 0.885*** -*** 0.895***	@ 15 °C ***	ISO 3675 ***
Density ***	*** 885*** - *** 895*** kg/m³***	@ 15 °C***	ISO 3675***
Water solubility	***	Insoluble***	
Solubility in other solvents		No information available***	
logPow		No information available***	
Autoignition temperature		No information available***	
Decomposition temperature		No information available	
Viscosity, kinematic ***	*** 96*** -*** 110*** mm2/s***	@ 40 °C ***	ISO 3104 ***
Explosive properties	Not explosive***		
Oxidising properties	Not applicable***		
Possibility of hazardous reactions	None under normal processing***		

9.2. Other information

Freezing point No information available

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Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

General Information None under normal processing.***

10.2. Chemical stability

Stability Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions No dangerous reaction known under conditions of normal use.***

10.4. Conditions to avoid

Conditions to avoid Keep away from open flames, hot surfaces and sources of ignition. Keep away from heat and sparks.***

10.5. Incompatible materials

Materials to avoid Strong oxidising agents.***

10.6. Hazardous Decomposition Products

Hazardous Decomposition Products Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. Combustion products include sulphur oxides (SO2 and SO3) and Hydrogen sulphide H2S, Mercaptans, Phosphorous oxides, Nitrogen oxides (NOx), Silicon dioxide.***

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity Local effects Product Information

Skin contact . Not classified based on available data. May produce an allergic reaction. High pressure injection of the products under the skin may have very serious consequences even though no symptom or injury may be apparent.***

Eye contact . Not classified based on available data.***

Inhalation . Not classified based on available data. Inhalation of vapours in high concentration may cause irritation of respiratory system.***

Ingestion . Not classified based on available data. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.***

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Acute toxicity - Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
2,6-di-tert-butylphenol***	> 5000 mg/kg (Rat)	LD50 > 2000 mg/kg (Rabbit)	
(Z)-octadec-9-enylamine***	LD50 1689 mg/kg (Rat)	LD50 > 2000 mg/kg (Rat)	

Sensitisation

Sensitisation Not classified based on available data. Contains senitizer(s). May produce an allergic reaction.***

Specific effects

Carcinogenicity Not classified based on available data.***
Mutagenicity Not classified based on available data.***
Germ cell mutagenicity Not classified based on available data.***

Reproductive toxicity Not classified based on available data.***

Repeated dose toxicity

Target Organ Effects (STOT)

Specific target organ systemic toxicity (single exposure) Not classified based on available data.***

Specific target organ toxicity - repeated exposure Not classified based on available data.***

Aspiration toxicity Not classified based on available data.***

Other information

Other adverse effects Characteristic skin lesions (oil blisters) may develop following prolonged and repeated exposures (contact with contaminated clothing).***

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Harmful to aquatic life with long lasting effects.***

Acute aquatic toxicity - Product Information***

No information available.***

Acute aquatic toxicity - Component Information

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates.	Toxicity to fish	Toxicity to microorganisms
2,6-di-tert-butylphenol***	EC50 (72h) 1.2 mg/l	EC50 (48h) = 0.45 mg/L	LC50(96h) 1 mg/l (fish)	

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128-39-2		Daphnia magna		
(Z)-octadec-9-enylamine*** 112-90-3	EC50 (96h) 0.03 mg/l (Algae)	EC50 (48h) 0.011 mg/l (Daphnia magna)	LC50 (96h) 0.11 mg/l (Fish)	

Chronic aquatic toxicity - Product Information
No information available.***

Chronic aquatic toxicity - Component Information
.

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates.	Toxicity to fish	Toxicity to microorganisms
2,6-di-tert-butylphenol*** 128-39-2			NOEC (28d) 0.3 mg/l (fish)	

Effects on terrestrial organisms
No information available.***

12.2. Persistence and Degradability

General Information
No information available.

12.3. Bioaccumulative potential

Product Information No information available.***

logPow No information available***
Component Information .

Chemical Name	log Pow
2,6-di-tert-butylphenol*** - 128-39-2	4.48

12.4. Mobility in soil

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.***

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.***

12.6. Other adverse effects

General Information No information available.***

Section 13: DISPOSAL CONSIDERATIONS

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13.1. Waste treatment methods

Waste from residues / unused products	Should not be released into the environment. Do not empty into drains. Dispose of in accordance with the European Directives on waste and hazardous waste. Where possible recycling is preferred to disposal or incineration. 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 packageing	Empty containers should be taken to an approved waste handling site for recycling or disposal.***
EWC Waste Disposal No	According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used. The following Waste Codes are only suggestions:. 13 02 05.***
Other information	Refer to section 8 for safety and protective measures for disposal personnel.***

Section 14: TRANSPORT INFORMATION

ADR/RID	not regulated
IMDG/IMO	not regulated
ICAO/IATA	not regulated
ADN	***
UN/ID No	ID9006***
Hazard Class	9***
Hazard Labels	none***
Description	ID9006, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9 (2,6-di-tert-butylphenol, (Z)-octadec-9-enylamine)***
Equipment Requirements	PP***

Section 15: REGULATORY INFORMATION

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

European Union

REACH

All substances contained in this mixture have been pre-registered, registered or are exempt from registration in accordance with Regulation (CE) No. 1907/2006 (REACh)***

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International Inventories: All the substances contained in this product are listed or exempted from listing in the following inventories:
U.S.A. (TSCA)***

Further information

No information available***

15.2. Chemical Safety Assessment

Chemical Safety Assessment No information available***

15.3. National regulatory information

The United Kingdom

• Avoid exceeding occupational exposure limits (see section 8).

Ireland

• Avoid exceeding occupational exposure limits (see section 8).

Section 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3
H302 - Harmful if swallowed
H304 - May be fatal if swallowed and enters airways
H314 - Causes severe skin burns and eye damage
H315 - Causes skin irritation
H318 - Causes serious eye damage
H335 - May cause respiratory irritation
H373 - May cause damage to organs through prolonged or repeated exposure
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects
H412 - Harmful to aquatic life with long lasting effects***

Abbreviations, acronyms
ACGIH = American Conference of Governmental Industrial Hygienists
bw = body weight
bw/day = body weight/day
EC x = Effect Concentration associated with x% response
GLP = Good Laboratory Practice
IARC = International Agency for Research of Cancer
LC50 = 50% Lethal concentration - Concentration of a chemical in air or a chemical in water which causes the death of 50% (one half) of a group of test animals
LD50 = 50% Lethal Dose - Chemical amount, given at once, which causes the death of 50% (one half) of a group of test animals
LL = Lethal Loading
NIOSH = National Institute of Occupational Safety and Health
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration

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NOEL = No Observed Effect Level
OECD = Organization for Economic Co-operation and Development
OSHA = Occupational Safety and Health Administration
UVCB = Substance of unknown or Variable composition, Complex reaction products or Biological material
DNEL = Derived No Effect Level
PNEC = Predicted No Effect Concentration
dw = dry weight
fw = fresh water
mw = marine water
or = occasional release

Legend Section 8

TWA: Time Weight Average
STEL: Short Time Exposure Limit

+	Sensitiser	*	Skin designation
**	Hazard Designation	C:	Carcinogen
M:	Mutagen	R:	Toxic to reproduction

Revision Date: 2018-12-04
Revision Note *** Indicates updated section.
This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

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 Safety Data Sheet