





## SAFETY DATA SHEET

according to the Global Harmonized System

SDS # : 30561

### CARTER SH 320

Issuing date: 2016-03-23

Revision Date: 2019-09-12

Version 1.01

#### Other hazards which do not result in classification

**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.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Mixture

**Chemical nature** The product is made from synthetic base oils

Chemical Name	CAS-No	EC-No	Weight %
Amines, C10-14-tert-alkyl	^	701-175-2	0.1-<0.25
Alkoxylated long chain alkanol borate	^	-	0.1-<0.25
(Z)-octadec-9-enylamine	112-90-3	204-015-5	0.025-<0.1

### 4. FIRST AID MEASURES

#### Description of necessary 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 Center 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.

#### Most important symptoms/effects, acute and delayed



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<b>Skin contact</b>	Not classified based on available data. High pressure injection of the products under the skin may have very serious consequences even though no symptom or injury may be apparent. May produce an allergic reaction.
<b>Eye contact</b>	Not classified based on available data.
<b>Inhalation</b>	Not classified based on available data. Inhalation of vapors in high concentration may cause irritation of respiratory system.
<b>Ingestion</b>	Not classified based on available data. 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.

#### **5. FIRE-FIGHTING MEASURES**

##### Suitable Extinguishing Media

**Suitable Extinguishing Media**              Carbon dioxide (CO<sub>2</sub>). ABC powder. Foam. Water spray or fog.

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

##### Specific hazards arising from the chemical

**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 ( SO<sub>2</sub> and SO<sub>3</sub> ) and Hydrogen sulphide H<sub>2</sub>S, Mercaptans, Nitrogen oxides (NO<sub>x</sub>), Phosphorous oxides, Silicon dioxide.

##### Advice 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.

#### **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. For personal protection see section 8. Ensure



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adequate ventilation. Remove all sources of ignition.

#### 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.

#### 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.

#### Other information

##### **Personal Protective Equipment**

See Section 8 for more detail.

##### **Waste treatment**

See section 13.

## 7. HANDLING AND STORAGE

#### Precautions for safe handling

##### **Advice on safe handling**

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.

##### **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. Regular cleaning of equipment, work area and clothing is recommended. 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. Store at room temperature. Protect from moisture.

##### **Materials to Avoid**

Strong oxidizing agents.



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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure limits

Do not contain substance with occupational exposure limits in concentration above regulatory thresholds

### Appropriate engineering 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.

### Individual protection measures, such as personal protective equipment (PPE)

#### 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 ITSELF. 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. 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.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### General Information

Appearance	limpid
Color	yellow To amber
Physical State @20°C	liquid
Odor	Characteristic
Odor Threshold	No information available

#### Important health safety and environmental information

<u>Property</u>	<u>Values</u>	<u>Remarks</u>	<u>Method</u>
pH		Not applicable	
Melting point/range		Not applicable	
Boiling point/boiling range		No information available	
Flash point	233 °C 451.4 °F		Cleveland Open Cup (COC) Cleveland Open Cup (COC).
Evaporation rate		No information available	
Flammability Limits in Air			
upper		No information available	
Lower		No information available	
Vapor Pressure		No information available	
Vapor density		No information available	
Relative density	0.857 - 0.867	@ 15 °C	
Density	857 - 867 kg/m <sup>3</sup>	@ 15 °C	
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	307 - 352 mm <sup>2</sup> /s	@ 40 °C	ASTM D445
Explosive properties	Not explosive		
Oxidizing Properties	Not applicable		
Possibility of hazardous reactions	None under normal processing		



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#### Other information

**Freezing Point** No information available

#### **10. STABILITY AND REACTIVITY**

**Reactivity** None under normal processing.

**Chemical stability** Stable under recommended storage conditions.

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

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

**Materials to Avoid** 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. Combustion products include sulphur oxides ( SO<sub>2</sub> and SO<sub>3</sub> ) and Hydrogen sulphide H<sub>2</sub>S, Mercaptans, Nitrogen oxides (NO<sub>x</sub>), Phosphorous oxides, Silicon dioxide.

#### **11. TOXICOLOGICAL INFORMATION**

##### Information on likely routes of exposure

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

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

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

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

##### Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms** No information available.



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

##### Acute toxicity - Product Information

**Oral** Not classified based on available data.  
0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

**Dermal** Not classified based on available data.  
0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

**Inhalation** Not classified based on available data.  
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity

##### Acute toxicity - Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Amines, C10-14-tert-alkyl	LD50 500 - 1177 mg/kg (Rat)	LD50 251 mg/kg (Rabbit)	LC50(4h) 157 - 231 ppm (Rat - vapor)
Alkoxylated long chain alkanol borate	LD50 1000 mg/kg (Rat)	LD50 >2000 mg/kg (Rat)	
(Z)-octadec-9-enylamine	LD50 1689 mg/kg (Rat)	LD50 > 2000 mg/kg (Rat)	

**Skin corrosion/irritation** Not classified based on available data.

**Serious eye damage/eye irritation** Not classified based on available data.

**Sensitization** Not classified based on available data. May produce an allergic reaction. Contains sensitizer(s). The supplier of one or more of the components contained within this formulation has indicated that he has data on the components and/or similar mixtures, which confirms that at the concentration used, classification is not required.

**Carcinogenicity** Not classified based on available data

**Germ Cell Mutagenicity** Not classified based on available data

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

**Target Organ Effects (STOT)** None known

**STOT - single exposure** Not classified based on available data

**STOT - repeated exposure** Not classified based on available data

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



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

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Not classified based on available data. The supplier of one or more of the components contained within this formulation has indicated that he has data on the components and/or similar mixtures, which confirms that at the concentration used, classification is not required.

### 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
Amines, C10-14-tert-alkyl ^	EC50 (72h) 0.44 mg/l (Algae)	EC50(48h) 0.24 mg/l (Daphnia magna)	LC50 (96h) 1.3 mg/l (Fish)	EC50(30min) 63.5 mg/l
Alkoxylated long chain alkanol borate ^	EL50(72h) 0.41 mg/l (Pseudokirchneriella subcapitata)	EL50(48h) 0.39 mg/l (Daphnia magna)	LC50(96h) 0.876 mg/l (Danio rerio)	
(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
Alkoxylated long chain alkanol borate ^		NOEC(21d) 0.77 mg/l (Daphnia magna)		

**Effects on terrestrial organisms** No information available.

### Persistence and degradability

No information available.



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#### Bioaccumulative potential

**Product Information** No information available.

**logPow** No information available

#### Component Information

Chemical Name	log Pow
Amines, C10-14-tert-alkyl - ^	2.9 @ 23 °C and pH 7

#### 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

**General Information** No information available.

### 13. DISPOSAL CONSIDERATIONS

**Waste from Residues / Unused Products** Should not be released into the environment. Do not empty into drains. Dispose of in accordance with all applicable national environmental laws and regulations. Where possible recycling is preferred to disposal or incineration.

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

**Other information** Refer to section 8 for safety and protective measures for disposal personnel.

### 14. TRANSPORT INFORMATION

**ADR/RID** Not regulated

**IMDG/IMO** Not regulated

**ICAO/IATA** Not regulated

**ADN** Not regulated



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#### 15. REGULATORY INFORMATION

##### International Inventories

All the substances contained in this product are listed or exempted from listing in the following inventories:

Australia (AICS)  
 Korea (KECL)  
 U.S.A. (TSCA)  
 Japan (ENCS)  
 Canada (DSL/NDSL)  
 Philippines (PICCS)  
 China (IECSC)

##### Further information

No information available

##### National regulatory information

No information available

#### 16. OTHER INFORMATION

**Issuing date:** 2016-03-23  
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**Revision Note** No information available.

##### **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

NOEL = No Observed Effect Level

OECD = Organization for Economic Co-operation and Development

OSHA = Occupational Safety and Health Administration



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UVCB = Substance of unknown or Variable composition, Complex reaction products or Biological material

**Legend**

Section 8

ACGIH - American Conference of Governmental Industrial Hygienists

TWA - Time Weight Average

STEL - Short Term Exposure Limits

S\* - Skin notation Ceiling: Maximum limit value

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**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 the Safety Data Sheet**