



CARBON-ATE LIQUID ADDITIVE

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Date of issue: 4/29/2022 Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product code : 1970HOT

1.2. Recommended use and restrictions on use

No additional information available

1.3. Supplier

KARCHER NORTH AMERICA
6398 N Karcher Way
Aurora, 80019
United States
T 303-738-2400
info@karcherna.com

1.4. Emergency telephone number

Emergency number : 800-535-5053
For Chemical Emergency Call INFOTRAC 24hr/day 7days/week
Within USA and Canada: 1-800-535-5053
Outside USA and Canada: 011-1-352-323-3500
(collect calls accepted)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

| | | |
|--|------|---|
| Flammable liquids Category 4 | H227 | Combustible liquid |
| Acute toxicity (inhalation:dust,mist) Category 4 | H332 | Harmful if inhaled |
| Skin corrosion/irritation Category 1 | H314 | Causes severe skin burns and eye damage |
| Serious eye damage/eye irritation Category 1 | H318 | Causes serious eye damage |
| Hazardous to the aquatic environment - Acute Hazard Category 3 | H402 | Harmful to aquatic life |

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

H227 - Combustible liquid
H314 - Causes severe skin burns and eye damage
H318 - Causes serious eye damage
H332 - Harmful if inhaled
H402 - Harmful to aquatic life

Precautionary statements (GHS US) :

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 - Do not breathe dust/fume/gas/mist/vapours/spray.

CARBON-ATE LIQUID ADDITIVE

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

P261 - Avoid breathing dust/fume/gas/mist/vapours.
P264 - Wash hands, forearms and face thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a poison center/doctor
P312 - Call a poison center/doctor if you feel unwell
P363 - Wash contaminated clothing before reuse.
P370+P378 - In case of fire: Use media other than water to extinguish.
P403+P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local regulations

2.3. Other hazards which do not result in classification

Other hazards which do not result in classification : None under normal conditions.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % |
|--------------------------------------|---------------------|-------------|
| BUTHOXYETHANOL | CAS-No.: 111-76-2 | 30 – 50 |
| ALCOHOLS, C6-C12, ETHOXYLATED | CAS-No.: 68439-45-2 | 30 – 50 |
| ALKYL (C10-C16) BENZENESULFONIC ACID | CAS-No.: 68584-22-5 | 21.6 – 24 |
| SULFURIC ACID | CAS-No.: 7664-93-9 | 0.24 – 0.72 |

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Call a physician immediately.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately.

CARBON-ATE LIQUID ADDITIVE

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

4.2. Most important symptoms and effects (acute and delayed)

| | |
|-------------------------------------|---------------------------|
| Symptoms/effects after skin contact | : Burns. |
| Symptoms/effects after eye contact | : Serious damage to eyes. |
| Symptoms/effects after ingestion | : Burns. |

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

| | |
|--|--------------------------------|
| Fire hazard | : Combustible liquid. |
| Explosion hazard | : No direct explosion hazard. |
| Hazardous decomposition products in case of fire | : Toxic fumes may be released. |

5.3. Special protective equipment and precautions for fire-fighters

| | |
|--------------------------------|--|
| Firefighting instructions | : Do not enter fire area without proper protective equipment, including respiratory protection. |
| Protection during firefighting | : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Do not handle until all safety precautions have been read and understood.

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

| | |
|-------------------------|---|
| For containment | : Collect spillage. |
| Methods for cleaning up | : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters. |
| Other information | : Dispose of materials or solid residues at an authorized site. |

6.4. Reference to other sections

For further information refer to section 13.

CARBON-ATE LIQUID ADDITIVE

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 7: Handling and storage

7.1. Precautions for safe handling

| | |
|-----------------------------------|---|
| Additional hazards when processed | : Not expected to present a significant hazard under anticipated conditions of normal use. |
| Precautions for safe handling | : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray. |
| Hygiene measures | : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. |

7.2. Conditions for safe storage, including any incompatibilities

| | |
|--------------------|---|
| Technical measures | : Comply with applicable regulations. |
| Storage conditions | : Store in a well-ventilated place. Keep cool. Store locked up. |

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| | |
|--|--|
| CARBON-ATE LIQUID ADDITIVE | |
| No additional information available | |
| BUTHOXYETHANOL (111-76-2) | |
| USA - ACGIH - Occupational Exposure Limits | |
| Local name | 2-Butoxyethanol (EGBE) |
| ACGIH OEL TWA [ppm] | 20 ppm |
| Remark (ACGIH) | TLV® Basis: Eye & URT irr. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans); BEI |
| Regulatory reference | ACGIH 2019 |
| USA - OSHA - Occupational Exposure Limits | |
| Local name | 2-Butoxyethanol |
| OSHA PEL (TWA) [1] | 240 mg/m ³ |
| OSHA PEL (TWA) [2] | 50 ppm |
| Regulatory reference (US-OSHA) | OSHA Annotated Table Z-1 |
| ALCOHOLS, C6-C12, ETHOXYLATED (68439-45-2) | |
| No additional information available | |
| ALKYL (C10-C16) BENZENESULFONIC ACID (68584-22-5) | |
| No additional information available | |
| SULFURIC ACID (7664-93-9) | |
| USA - ACGIH - Occupational Exposure Limits | |
| ACGIH OEL TWA | 0.2 mg/m ³ (Thoracic fraction) |

8.2. Appropriate engineering controls

| | |
|----------------------------------|--|
| Appropriate engineering controls | : Ensure good ventilation of the work station. |
| Environmental exposure controls | : Avoid release to the environment. |

CARBON-ATE LIQUID ADDITIVE

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Wear respiratory protection.

Personal protective equipment symbol(s):

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|------------------------|
| Physical state | : Liquid |
| Appearance | : Liquid. |
| Color | : Green |
| Odor | : Characteristic odour |
| Odor threshold | : No data available |
| pH | : 0.5 |
| Melting point | : Not applicable |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : No data available |
| Relative evaporation rate (butyl acetate=1) | : No data available |
| Flammability (solid, gas) | : Not applicable. |
| Vapor pressure | : No data available |
| Relative vapor density at 20 °C | : No data available |
| Relative density | : No data available |
| Solubility | : No data available |
| Partition coefficient n-octanol/water (Log Pow) | : No data available |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosion limits | : No data available |
| Explosive properties | : No data available |
| Oxidizing properties | : No data available |

9.2. Other information

No additional information available

CARBON-ATE LIQUID ADDITIVE

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Harmful if inhaled.

| CARBON-ATE LIQUID ADDITIVE | |
|---|--|
| ATE US (dust, mist) | 3.75 mg/l/4h |
| BUTHOXYETHANOL (111-76-2) | |
| LD50 oral rat | 1746 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male, Experimental value, Oral, 14 day(s)) |
| LC50 inhalation rat (mg/l) | > 4.26 mg/l (4 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s)) |
| ATE US (oral) | 1414 mg/kg body weight |
| ATE US (dermal) | 1100 mg/kg body weight |
| ATE US (gases) | 4500 ppmV/4h |
| ATE US (vapors) | 11 mg/l/4h |
| ATE US (dust, mist) | 1.5 mg/l/4h |
| ALCOHOLS, C6-C12, ETHOXYLATED (68439-45-2) | |
| LD50 oral rat | > 1000 mg/kg (Rat, Oral) |
| LD50 dermal rabbit | > 2000 mg/kg (Rabbit, Dermal) |
| ALKYL (C10-C16) BENZENESULFONIC ACID (68584-22-5) | |
| LD50 dermal rabbit | > 5000 mg/kg body weight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity) |
| LC50 inhalation rat (mg/l) | > 1.9 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity) |

CARBON-ATE LIQUID ADDITIVE

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SULFURIC ACID (7664-93-9)

| | |
|---------------|--|
| LD50 oral rat | 2140 mg/kg body weight (Rat, Experimental value, Oral) |
| ATE US (oral) | 2140 mg/kg body weight |

| | |
|-----------------------------------|---|
| Skin corrosion/irritation | : Causes severe skin burns. pH: 0.5 |
| Serious eye damage/irritation | : Causes serious eye damage. pH: 0.5 |
| Respiratory or skin sensitization | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |

BUTHOXYETHANOL (111-76-2)

| | |
|------------|----------------------|
| IARC group | 3 - Not classifiable |
|------------|----------------------|

SULFURIC ACID (7664-93-9)

| | |
|--|-------------------------|
| National Toxicity Program (NTP) Status | Known Human Carcinogens |
|--|-------------------------|

| | |
|-----------------------|------------------|
| Reproductive toxicity | : Not classified |
| STOT-single exposure | : Not classified |

BUTHOXYETHANOL (111-76-2)

| | |
|----------------------|-----------------------------------|
| STOT-single exposure | May cause respiratory irritation. |
|----------------------|-----------------------------------|

| | |
|------------------------|------------------|
| STOT-repeated exposure | : Not classified |
|------------------------|------------------|

BUTHOXYETHANOL (111-76-2)

| | |
|-----------------------------------|--|
| NOAEL (dermal,rat/rabbit,90 days) | > 150 mg/kg body weight Animal: rabbit, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study) |
|-----------------------------------|--|

ALKYL (C10-C16) BENZENESULFONIC ACID (68584-22-5)

| | |
|--------------------------|--|
| NOAEL (oral,rat,90 days) | 500 mg/kg body weight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents) |
|--------------------------|--|

| | |
|-----------------------------------|--|
| NOAEL (dermal,rat/rabbit,90 days) | > 1000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study) |
|-----------------------------------|--|

| | |
|-------------------------------------|---------------------------|
| Aspiration hazard | : Not classified |
| Viscosity, kinematic | : No data available |
| Symptoms/effects after skin contact | : Burns. |
| Symptoms/effects after eye contact | : Serious damage to eyes. |
| Symptoms/effects after ingestion | : Burns. |

SECTION 12: Ecological information

12.1. Toxicity

| | |
|-------------------|----------------------------|
| Ecology - general | : Harmful to aquatic life. |
|-------------------|----------------------------|

BUTHOXYETHANOL (111-76-2)

| | |
|--------------------|--|
| LC50 - Fish [1] | 1474 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value, Lethal) |
| EC50 - Daphnia [1] | 1550 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect) |
| ErC50 algae | 1840 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration) |

CARBON-ATE LIQUID ADDITIVE

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| BUTHOXYETHANOL (111-76-2) | |
|----------------------------------|--|
| NOEC (chronic) | 100 mg/l Test organisms (species): Daphnia magna Duration: '21 d' |
| NOEC chronic fish | > 100 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) Duration: '21 d' |

| SULFURIC ACID (7664-93-9) | |
|----------------------------------|----------------------------------|
| LC50 - Fish [1] | 42 mg/l (96 h, Gambusia affinis) |
| EC50 - Daphnia [1] | 29 mg/l (24 h, Daphnia magna) |

12.2. Persistence and degradability

| BUTHOXYETHANOL (111-76-2) | |
|----------------------------------|---------------------------------|
| Persistence and degradability | Readily biodegradable in water. |

| ALCOHOLS, C6-C12, ETHOXYLATED (68439-45-2) | |
|---|---------------------------------|
| Persistence and degradability | Readily biodegradable in water. |

| SULFURIC ACID (7664-93-9) | |
|----------------------------------|-----------------------------------|
| Persistence and degradability | Biodegradability: not applicable. |
| Chemical oxygen demand (COD) | Not applicable |
| ThOD | Not applicable |
| BOD (% of ThOD) | Not applicable |

12.3. Bioaccumulative potential

| BUTHOXYETHANOL (111-76-2) | |
|---|--|
| Partition coefficient n-octanol/water (Log Pow) | 0.81 (Experimental value, BASF test, 25 °C) |
| Bioaccumulative potential | Low potential for bioaccumulation (Log Kow < 4). |

| ALCOHOLS, C6-C12, ETHOXYLATED (68439-45-2) | |
|---|------------------------|
| Partition coefficient n-octanol/water (Log Pow) | 3.01 (Estimated value) |
| Bioaccumulative potential | Not bioaccumulative. |

| SULFURIC ACID (7664-93-9) | |
|---|------------------------|
| Partition coefficient n-octanol/water (Log Pow) | -2.2 (Estimated value) |
| Bioaccumulative potential | Not bioaccumulative. |

12.4. Mobility in soil

| BUTHOXYETHANOL (111-76-2) | |
|--|--|
| Surface tension | 65.03 mN/m (20 °C, 2 g/l) |
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 0.451 – 0.882 (log Koc, SRC PCKOCWIN v2.0, Calculated value) |
| Ecology - soil | Highly mobile in soil. |

12.5. Other adverse effects

No additional information available

CARBON-ATE LIQUID ADDITIVE

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 13: Disposal considerations

13.1. Disposal methods

Regional legislation (waste) : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

14.1. UN number

DOT NA No : UN1760

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Corrosive liquids, n.o.s. (SUFONIC ACID DDBSA), 8, II

14.3. Transport hazard class(es)

DOT
Transport hazard class(es) (DOT) : 8
Hazard labels (DOT) : 8



14.4. Packing group

Packing group (DOT) : II

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

DOT
UN-No.(DOT) : UN1760

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

SULFURIC ACID (7664-93-9)

| | |
|--|---------|
| CERCLA RQ | 1000 lb |
| RQ (Reportable quantity, section 304 of EPA's List of Lists) | 1000 lb |

CARBON-ATE LIQUID ADDITIVE

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SULFURIC ACID (7664-93-9)

| | |
|--|---------|
| SARA Section 302 Threshold Planning Quantity (TPQ) | 1000 lb |
|--|---------|

15.2. International regulations

SULFURIC ACID (7664-93-9)

Listed as carcinogen on NTP (National Toxicology Program)

15.3. US State regulations

⚠ WARNING: This product can expose you to ETHYLENE OXIDE, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

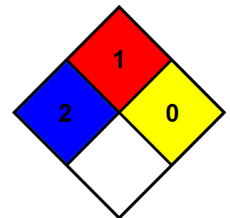
SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Full text of H-phrases

| | |
|------|---|
| H227 | Combustible liquid |
| H314 | Causes severe skin burns and eye damage |
| H318 | Causes serious eye damage |
| H332 | Harmful if inhaled |
| H402 | Harmful to aquatic life |

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
NFPA fire hazard : 1 - Materials that must be preheated before ignition can occur.
NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating
Health : 2 Moderate Hazard - Temporary or minor injury may occur
Flammability : 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)
Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.
Personal protection : B - Safety glasses, Gloves

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.