

SAFETY DATA SHEET



ALPHA-STEP® PC-48

Version 1.1
Revision Date:
10/03/2024

Date of last issue: 10/18/2023
Date of first issue: 10/18/2023

SECTION 1. IDENTIFICATION

Product name : ALPHA-STEP® PC-48

Product code : 1006058

Manufacturer or supplier's details

Company name of supplier : STEPAN US

Address : 1101 Skokie Blvd, Suite 500
Northbrook IL 60062

Telephone : (847) 446-7500

Emergency telephone Medical 1-800-228-5635 (Available 24 hours a day.
SDS/Product information may not be
available for the emergency service.)
Chemtrec 1-800-424-9300
Chemtrec Int'l 1-703-527-3887

Recommended use of the chemical and restrictions on use

Recommended use : Surfactant

Restrictions on use : For industrial use only.

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Serious eye damage : Category 1

Short-term (acute) aquatic hazard : Category 2

Long-term (chronic) aquatic hazard : Category 3

GHS label elements

Hazard pictograms :



Signal Word : Danger

Hazard Statements : H318 Causes serious eye damage.
H401 Toxic to aquatic life.
H412 Harmful to aquatic life with long lasting effects.

SAFETY DATA SHEET



ALPHA-STEP® PC-48

Version 1.1
Revision Date: 10/03/2024

Date of last issue: 10/18/2023
Date of first issue: 10/18/2023

Precautionary Statements

Prevention:

P273 Avoid release to the environment.
P280 Wear eye protection/ face protection.

Response:

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.

Storage:

Store away from incompatible materials.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components

Chemical name	CAS-No.	Concentration (% w/w)
Fatty acids, C12-18, Me esters, sulfonated, sodium salts	149458-07-1	30 - 40
Fatty acids, C12-18, Me esters	68937-84-8	1 - 5
sodium sulphate	7757-82-6	1 - 5

SECTION 4. FIRST AID MEASURES

- General advice : Get medical attention immediately if symptoms occur. Show this material safety data sheet to the doctor in attendance.
- If inhaled : Move to fresh air.
If symptoms persist, call a physician.
- In case of skin contact : Remove contaminated clothing and shoes.
Wash off with soap and plenty of water.
Get medical attention if irritation develops and persists.
Wash contaminated clothing before reuse.
- In case of eye contact : In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Continue rinsing.
Get medical attention immediately.
- If swallowed : Rinse mouth.
If symptoms persist, call a physician.

SAFETY DATA SHEET



ALPHA-STEP® PC-48

Version
1.1

Revision Date:
10/03/2024

Date of last issue: 10/18/2023
Date of first issue: 10/18/2023

Most important symptoms and effects, both acute and delayed : Causes serious eye damage.

Notes to physician : Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Dry powder
Foam
Fog
Carbon dioxide (CO₂)

Unsuitable extinguishing media : High volume water jet

Further information : Standard procedure for chemical fires.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Special protective equipment for fire-fighters : Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Keep people away from and upwind of spill/leak.
Use personal protective equipment.
Refer to protective measures listed in sections 7 and 8.

Environmental precautions : Try to prevent the material from entering drains or water courses.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up : Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).
Collect as much of the spill as possible with a suitable absorbent material.
Keep in suitable, closed containers for disposal.
After cleaning, flush away traces with water.

SECTION 7. HANDLING AND STORAGE

Technical measures : Ensure that eyewash stations and safety showers are close to the workstation location.

SAFETY DATA SHEET



ALPHA-STEP® PC-48

Version 1.1
Revision Date: 10/03/2024

Date of last issue: 10/18/2023
Date of first issue: 10/18/2023

- Advice on protection against fire and explosion : Normal measures for preventive fire protection.
- Advice on safe handling : Wear personal protective equipment.
For personal protection see section 8.
Do not get in eyes or mouth or on skin.
Do not swallow.
Handle and open container with care.
Do not breathe dust, fume, gas, mist, vapors or spray.
Do not eat, drink or smoke when using this product.
Keep container closed when not in use.
Heat only in areas with appropriate exhaust ventilation.
As a rule, at least 10 air changes per hour are recommended at the workplace.
- Conditions for safe storage : Store in original container.
Keep container closed when not in use.
- Materials to avoid : Store away from incompatible materials (see Section 10 of the SDS).
- Further information on storage stability : No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Personal protective equipment

- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.
- Hand protection
- Remarks : Protective gloves
- Eye protection : Wear safety glasses with side shields or goggles.
Face-shield
- Skin and body protection : Lightweight protective clothing
- Hygiene measures : General industrial hygiene practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : liquid
- Color : yellow

SAFETY DATA SHEET



ALPHA-STEP® PC-48

Version 1.1
Revision Date: 10/03/2024

Date of last issue: 10/18/2023
Date of first issue: 10/18/2023

Odor	: characteristic
pH	: 5 - 7 Concentration: 10 % (as aqueous solution)
Melting point/freezing point	: 18.00 °F / -7.78 °C
Pour point	23 °F / -5 °C
Flash point	: > 201.0 °F / > 93.9 °C Method: Pensky-Martens closed cup
Density	: 8.74 lb/gal
Solubility(ies) Water solubility	: soluble
Viscosity Viscosity, dynamic	: 300 mPa.s (77 °F / 25 °C)

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No decomposition if stored and applied as directed.
Chemical stability	: No decomposition if stored and applied as directed.
Possibility of hazardous reactions	: Stable under recommended storage conditions. No hazards to be specially mentioned.
Conditions to avoid	: Incompatible materials
Incompatible materials	: Strong oxidizing agents Alkalis
Hazardous decomposition products	: Sulfur compounds Sulfur oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity	: LD50 (Rat): > 5,000 mg/kg
Acute inhalation toxicity	: Assessment: The substance or mixture has no acute inhalation toxicity

SAFETY DATA SHEET



ALPHA-STEP® PC-48

Version 1.1
Revision Date: 10/03/2024

Date of last issue: 10/18/2023
Date of first issue: 10/18/2023

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Product:

Result : No skin irritation

Serious eye damage/eye irritation

Causes serious eye damage.

Product:

Result : Corrosive

Respiratory or skin sensitization

Skin sensitization

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Product:

Result : Does not cause skin sensitization.

Result : Does not cause respiratory sensitization.

Germ cell mutagenicity

Not classified based on available information.

Product:

Germ cell mutagenicity - Assessment : Contains no ingredient listed as a mutagen

Carcinogenicity

Not classified based on available information.

Product:

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

IARC No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

ALPHA-STEP® PC-48

Version 1.1
Revision Date:
10/03/2024

Date of last issue: 10/18/2023
Date of first issue: 10/18/2023

Reproductive toxicity

Not classified based on available information.

Product:

Reproductive toxicity - Assessment : No toxicity to reproduction

STOT-single exposure

Not classified based on available information.

Product:

Assessment : The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT-repeated exposure

Not classified based on available information.

Product:

Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Repeated dose toxicity**Product:**

Remarks : No data available

Aspiration toxicity

Not classified based on available information.

Further information**Product:**

Remarks : No data available

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Product:**

Toxicity to fish : LC50 (Fish): 4.7 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia): 6.25 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : EC50 (algae): 1.8 mg/l
Exposure time: 72 h

Ecotoxicology Assessment

SAFETY DATA SHEET



ALPHA-STEP® PC-48

Version 1.1
Revision Date: 10/03/2024

Date of last issue: 10/18/2023
Date of first issue: 10/18/2023

Acute aquatic toxicity : Toxic to aquatic life.
Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

Persistence and degradability

Product:

Biodegradability : Result: Readily biodegradable.

Bioaccumulative potential

Components:

sodium sulphate:

Bioaccumulation : Bioconcentration factor (BCF): 0.5
Remarks: No bioaccumulation is to be expected (log Pow <= 4).

Mobility in soil

No data available

Other adverse effects

Product:

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of in accordance with local regulations.
The hazard and precautionary statements displayed on the label also apply to any residues left in the container.
Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

SAFETY DATA SHEET



ALPHA-STEP® PC-48

Version 1.1
Revision Date: 10/03/2024

Date of last issue: 10/18/2023
Date of first issue: 10/18/2023

IMDG-Code

Not regulated as a dangerous good

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

Not applicable for product as supplied.

Domestic regulation

49 CFR

Not regulated as a dangerous good

Special precautions for user

Not applicable

SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity

Listed substances in the product are at low enough levels to not be expected to exceed the RQ

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Serious eye damage or eye irritation

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App. A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. Clean Water Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. Clean Water Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

California Prop. 65

WARNING: This product can expose you to chemicals including methanol, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

The ingredients of this product are reported in the following inventories:

SAFETY DATA SHEET



ALPHA-STEP® PC-48

Version 1.1
Revision Date: 10/03/2024

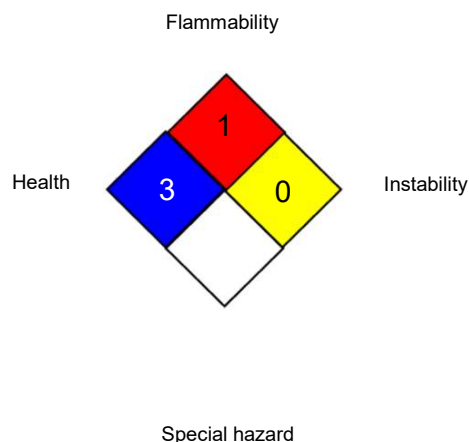
Date of last issue: 10/18/2023
Date of first issue: 10/18/2023

TSCA	: On the inventory, or in compliance with the inventory
AIIC	: On the inventory, or in compliance with the inventory
DSL	: On the inventory, or in compliance with the inventory
IECSC	: All components are listed on the inventory, regulatory obligations/restrictions apply
ENCS	: On the inventory, or in compliance with the inventory
ISHL	: Not in compliance with the inventory
NZIoC	: On the inventory, or in compliance with the inventory
PICCS	: Not in compliance with the inventory

SECTION 16. OTHER INFORMATION

Further information

NFPA 704:



HMIS® IV:

HEALTH	/	3
FLAMMABILITY		1
PHYSICAL HAZARD		0

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC

Stepan

Version 1.1 Revision Date: 10/03/2024

Date of last issue: 10/18/2023
Date of first issue: 10/18/2023

- International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECL - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Terms and Conditions. This MSDS is designed only as guidance for the products to which it applies. To the greatest extent permitted by applicable law, nothing contained herein creates any legal obligation including contractual obligations, expressed or implied warranties, including any warranties of merchantability or fitness for particular purpose; or confers any intellectual property rights, including rights to use trademarks or a license to use patents, issued or pending. The information contained herein is based on the manufacturer's own study and the work of others, and is subject to change at any time without further notice. There is no warranty, expressed or implied, as to the accuracy, completeness or adequacy of the information contained herein, and neither the provider nor the manufacturer (nor the agents, directors, officers, contractors or employees of either) are liable to any party for any damages of any nature, including direct, special or consequential damages arising out of or in connection with the accuracy, completeness, adequacy or furnishing of any information in this MSDS, or in any other way related (directly or indirectly) to this MSDS. The receipt and use of this information constitutes consent to these terms and conditions.

Revision Date : 10/03/2024

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

US / Z8