Stepan 5

SAFETY DATA SHEET

1. Identification

Product identifier STEPANQUAT 50 NF

Other means of identification

Product code 3242 Recommended use Surfactant

Recommended restrictions For industrial use only. Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Stepan Company Company name Address 22 West Frontage Road Northfield, IL 60093

Emergency phone number

Chemtrec 1-800-424-9300 +1 703-527-3887 Chemtrec Int'I

2. Hazard(s) identification

Flammable liquids Category 3 Physical hazards Acute toxicity, oral Category 4 **Health hazards** Acute toxicity, inhalation Category 2 Skin corrosion/irritation Category 1 Serious eye damage/eye irritation Category 1 Specific target organ toxicity, single exposure Category 2 **Environmental hazards** Hazardous to the aquatic environment, acute Category 1

hazard

Hazardous to the aquatic environment,

long-term hazard

Not classified.

Label elements

OSHA defined hazards



Signal word Danger

Hazard statement Flammable liquid and vapor. Harmful if swallowed. Causes severe skin burns and eye damage. Causes serious eye damage. Fatal if inhaled. May cause damage to organs. Very toxic to aquatic

Category 1

life with long lasting effects.

Precautionary statement Prevention

Keep container tightly closed. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only outdoors or in a well-ventilated area. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. Wear

respiratory protection.

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If swallowed: Immediately call a poison center/doctor. If swallowed: Rinse mouth. Do NOT induce Response

> vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. 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. Specific treatment is urgent (see this label). Wash contaminated clothing before reuse. In case of fire: Use appropriate media to

extinguish. Collect spillage.

Keep cool. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Storage

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)

None known.

Supplemental information Not applicable.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Water		7732-18-5	40 - < 50
_Alkyl dimethyl benzyl ammonium chloride (C12-18)		68391-01-5	40 - < 50
Ethanol		64-17-5	5 - < 10

4. First-aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or

> artificial respiration if needed. Do not use mouth-to-mouth method if victim 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. Call a physician or poison control center immediately.

Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or Skin contact

poison control center immediately. Chemical burns must be treated by a physician. Wash

contaminated clothing before reuse.

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if Eye contact

present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Ingestion Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting.

Most important Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including

symptoms/effects, acute and delayed

Indication of immediate

medical attention and special treatment needed

If the product is ingested, probable mucosal damage may contraindicate the use of gastric lavage.

Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source

Treat the affected person appropriately.

Ensure that medical personnel are aware of the material(s) involved, and take precautions to General information

> Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). Do not use water jet as an extinguisher, as this will spread the fire.

protect themselves.

blindness could result.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

Specific hazards arising from the chemical

Special protective equipment

and precautions for firefighters Fire fighting

equipment/instructions

Specific methods

In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

Use standard firefighting procedures and consider the hazards of other involved materials.

Firefighters should wear full protective clothing including self contained breathing apparatus.

of ignition and flash back. During fire, gases hazardous to health may be formed.

General fire hazards Flammable liquid and vapor.

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6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Immediately evacuate personnel to safe areas. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. Do not breathe vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent product from entering drains. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions

Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Vapors may form explosive mixtures with air. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not breathe vapor. Do not get this material in contact with skin. Do not taste or swallow. Avoid prolonged exposure. Do not get this material on clothing. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Avoid release to the environment. Do not empty into drains.

Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in original tightly closed container. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Keep in an area equipped with sprinklers.

8. Exposure controls/personal protection

Occupational exposure limits

Components	Туре	Value	
Ethanol (CAS 64-17-5)	PEL	1900 mg/m3	
		1000 ppm	
US. ACGIH Threshold Limit Valu	ies		
Components	Туре	Value	
Ethanol (CAS 64-17-5)	STEL	1000 ppm	
US. NIOSH: Pocket Guide to Ch	emical Hazards		
Components	Туре	Value	
Ethanol (CAS 64-17-5)	TWA	1900 mg/m3	
		1000 ppm	

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

US OSUA Table 7.4 Limits for Air Conteminants (20 CER 1010 1000)

Eye/face protection Wear safety glasses with side shields (or goggles) and a face shield.

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other Wear appropriate chemical resistant clothing. Wear protective gloves.

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Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure

limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Wear positive pressure self-contained

breathing apparatus (SCBA).

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance Clear.

Physical state Liquid.

Form Not available.

ColorNot available.OdorNot available.Odor thresholdNot available.

pH 6.2 - 8 (10% in water)

Melting point/freezing point Not available.

Initial boiling point and boiling Not available.

range

Flash point 126.0 °F (52.2 °C) Pensky-Martens Closed Cup

Evaporation rate Estimated slower than ethyl ether

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower Not available.

(%)

Flammability limit - upper

Not available.

(%)

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressureNot determined or unknownVapor densityEstimated heavier than air

Relative density Not available.

Solubility(ies)

Solubility (water)

Auto-ignition temperature

Decomposition temperature

Viscosity

Not available.

Not available.

75 cP @ 25C

Other information

Density 0.97 g/ml 8.10 lb/gal

Pour point $18 \,^{\circ}\text{F} \, (-7.78 \,^{\circ}\text{C})$

10. Stability and reactivity

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

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the

flash point. Contact with incompatible materials.

Incompatible materials Strong oxidizing agents. Anionic surfactants

Hazardous decomposition

Upon decomposition, this product may yield oxides of nitrogen and ammonia, carbon dioxide, carbon monoxide and other low molecular weight bydrocarbons

products carbon monoxide and other low molecular weight hydrocarbons.

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11. Toxicological information

Information on likely routes of exposure

Inhalation Not likely, due to the form of the product.

Skin contact Causes severe skin burns.

Eye contact Causes serious eye damage.

Ingestion Harmful if swallowed. Causes digestive tract burns.

Symptoms related to the physical, chemical and toxicological characteristics

Burning pain and severe corrosive skin damage. Causes serious eye damage.

Information on toxicological effects

Acute toxicity Fatal if inhaled. Harmful if swallowed.

Product Species Test Results

STEPANQUAT 50 NF

Acute Dermal

Liquid

LD50 Rabbit > 2000 mg/kg

Inhalation

Mist

LC50 0.054 - 0.51 mg/l

Oral

Liquid

LD50 Rat > 500 mg/kg

Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/eye

irritation

Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization Not available.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicityNo data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicityThis product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

May cause damage to organs.

Specific target organ toxicity -

repeated exposure

Not applicable.

Aspiration hazard Not applicable.

12. Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Product Species Test Results

STEPANQUAT 50 NF

Aquatic

Acute

Algae EC50 Algae 0.126 ppm, 96 hours

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Product Species Test Results

LC50 0.0116 - 0.032 ppm, 48 hours Crustacea Daphnia

Fish LC50 Fish 0.056 ppm, 96 hours

Persistence and degradability Readily biodegradable. **Bioaccumulative potential** No data available. Partition coefficient n-octanol / water (log Kow)

Ethanol -0.31

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Dispose in accordance with all applicable regulations.

The waste code should be assigned in discussion between the user, the producer and the waste Hazardous waste code

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations.

Since emptied containers may retain product residue, follow label warnings even after container is Contaminated packaging

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. Transport information

DOT

UN number UN2920

UN proper shipping name Corrosive liquid, flammable, N.O.S. (Quaternary ammonium chloride, Ethanol), MARINE

POLLUTANT

Transport hazard class(es)

Class 8 Subsidiary risk 3 Packing group Ш

Environmental hazards

Yes Marine pollutant

Special precautions for user Not available.

IATA

UN number UN2920

UN proper shipping name Transport hazard class(es)

Corrosive liquid, flammable, N.O.S. (Quaternary ammonium chloride, Ethanol)

Class 8 Subsidiary risk 3 П Packing group **Environmental hazards** Yes

Special precautions for user Not available.

IMDG

UN2920 **UN** number

UN proper shipping name Corrosive liquid, flammable, N.O.S. (Quaternary ammonium chloride, Ethanol), MARINE

POLLUTANT

Transport hazard class(es)

Class 8 Subsidiary risk 3 П Packing group **Environmental hazards**

Yes Marine pollutant **EmS** F-E. S-C Special precautions for user Not available. Not available.

Transport in bulk according to

Annex II of MARPOL 73/78 and

the IBC Code

Material name: STEPANQUAT 50 NF SDS US



IATA; IMDG



Marine pollutant



15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

chemical

Yes

Classified hazard categories

Flammable (gases, aerosols, liquids, or solids)

Acute toxicity (any route of exposure)

Skin corrosion or irritation

Serious eye damage or eye irritation

Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act Not regulated.

(SDWA)

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Ethanol (CAS 64-17-5) Low priority

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory (NZIoC)	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances	Yes

⁽PICCS)

Taiwan Taiwan Inventory (TCSI)
United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

16. Other information, including date of preparation or last revision

 Issue date
 09-25-2014

 Revision date
 04-03-2018

Version # 07

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consequential damages arising out of or in connection with the accuracy, completeness, adequacy or furnishing of any information in this SDS, or in any other way related (directly or indirectly) to this SDS. The receipt and use of this information constitutes consent to these terms and conditions.

Revision information Product and Company Identification: Product and Company Identification

Identification: Recommended restrictions Hazard(s) identification: Disposal

Hazard(s) identification: Disposal Hazard(s) identification: Prevention

Composition / Information on Ingredients: Ingredients Physical & Chemical Properties: Multiple Properties

HazReg Data: International Inventories

GHS: Classification

Material name: STEPANQUAT 50 NF

Yes

Yes

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).