

SAFETY DATA SHEET

Issue Date 25-Jan-2021 **Revision Date** 26-Jan-2024 **Version** 5.9 **Page** 1 / 17

1. IDENTIFICATION

Product identifier

Product Name StablCal® Solution, <0.1 NTU

Other means of identification

Product Code(s) 2659742

Safety data sheet number M01393

Recommended use of the chemical and restrictions on use

Recommended Use Laboratory Use. Standard solution. Water Analysis.

Uses advised against Consumer use.

Restrictions on use For Laboratory Use Only.

Details of the supplier of the safety data sheet

Manufacturer Address

Hach Company, P.O.Box 389, Loveland, CO 80539, USA, +1(970) 669-3050

Emergency telephone number

+1(303) 623-5716 - 24 Hour Service

2. HAZARDS IDENTIFICATION

Classification

Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| Respiratory sensitization | Category 1 |
|---------------------------|------------|
| Skin sensitization | Category 1 |

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Signal word

Danger



Hazard statements

EN / AGHS Page 1/17

Product Name StablCal® Solution, <0.1 NTU **Revision Date** 26-Jan-2024

Page 2 / 17

H317 - May cause an allergic skin reaction

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

Precautionary statements

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P285 - In case of inadequate ventilation wear respiratory protection

P304 + P341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing

P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

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

P272 - Contaminated work clothing should not be allowed out of the workplace

P280 - Wear protective gloves, protective clothing, eye protection, and face protection

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

P363 - Wash contaminated clothing before reuse

Other Hazards Known

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Substance</u>

Not applicable

Mixture

Chemical Family Mixture.

Chemical nature Aqueous alkaline solution.

Percent ranges are used where confidential product information is applicable.

| Chemical name | CAS No | Percent Range | HMRIC # |
|--|-----------|------------------|---------|
| 1,3,5,7-Tetraazatricyclo[3.3.1.1(3,7)]decane | 100-97-0 | <10% | - |
| Sodium sulfate | 7757-82-6 | <1% | - |
| Formaldehyde | 50-00-0 | <0.1% | - |

4. FIRST AID MEASURES

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance.

Inhalation May cause allergic respiratory reaction. If breathing has stopped, give artificial respiration.

Get medical attention immediately. Remove to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Get immediate medical advice/attention.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin contact Wash with soap and water. May cause an allergic skin reaction. In the case of skin irritation

or allergic reactions see a physician.

Ingestion May produce an allergic reaction. Do NOT induce vomiting. Clean mouth with water and

drink afterwards plenty of water. Never give anything by mouth to an unconscious person.

Get immediate medical advice/attention.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

EN / AGHS Page 2/17

Product Name StablCal® Solution, <0.1 NTU

Revision Date 26-Jan-2024 Page 3 / 17

Most important symptoms and effects, both acute and delayed

Symptoms May cause allergy or asthma symptoms or breathing difficulties if inhaled. Coughing and/ or

wheezing. Itching. Rashes. Hives.

Indication of any immediate medical attention and special treatment needed

Note to physicians May cause sensitization in susceptible persons. Treat symptomatically.

5. FIRE-FIGHTING MEASURES

surrounding environment.

Unsuitable Extinguishing Media Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the

chemical

Product is or contains a sensitizer. May cause sensitization by inhalation and skin contact.

May cause sensitization by skin contact.

Hazardous combustion products This material will not burn.

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

U.S. NoticeOnly persons properly qualified to respond to an emergency involving hazardous

substances may respond to a spill according to federal regulations (OSHA 29 CFR

1910.120(a)(v)) and per your company's emergency response plan and

guidelines/procedures. See Section 13, Special Instructions for disposal assistance. Outside of the US, only persons properly qualified according to state or local regulations should

respond to a spill involving chemicals.

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal

protective equipment as required. Evacuate personnel to safe areas. Keep people away

from and upwind of spill/leak.

Other Information Refer to protective measures listed in Sections 7 and 8.

Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder,

sawdust). Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

Reference to other sectionsSee section 8 for more information. See section 13 for more information.

7. HANDLING AND STORAGE

EN / AGHS Page 3/17

Product Name StablCal® Solution, <0.1 NTU

Revision Date 26-Jan-2024

Page 4 / 17

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. Ensure adequate ventilation. Provide extract ventilation to points where emissions occur. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Remove contaminated

clothing and shoes. Take off contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up.

Keep out of the reach of children.

Flammability class Not applicable

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH |
|--|------------------------------------|--------------------------|-------------------------|
| 1,3,5,7-Tetraazatricyclo[3.3.1.1(3,7)]de | dermal sensitizer | NDF | NDF |
| cane | TWA: 1 mg/m ³ inhalable | | |
| CAS#: 100-97-0 | fraction and vapor | | |
| Formaldehyde | dermal sensitizer;respiratory | TWA: 0.75 ppm | IDLH: 20 ppm |
| CAS#: 50-00-0 | sensitizer | (vacated) TWA: 3 ppm | Ceiling: 0.1 ppm 15 min |
| | STEL: 0.3 ppm | (vacated) STEL: 10 ppm | TWA: 0.016 ppm |
| | TWA: 0.1 ppm | (vacated) Ceiling: 5 ppm | |
| | | STEL: 2 ppm | |

Appropriate engineering controls

Engineering Controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

exceeded or irritation is experienced, ventilation and evacuation may be required. Wear

breathing apparatus if exposed to vapors/dusts/aerosols.

Hand Protection Wear suitable gloves. Gloves must be inspected prior to use. The selected protective

gloves have to satisfy the specifications of EU Directive 2016/425 and the standard EN 374 derived from it. Chemical resistant gloves made of butyl rubber or nitrile rubber category III

according to EN 374-1:2016.

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

Skin and body protection Wear suitable protective clothing.

General Hygiene Considerations Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do

not eat, drink or smoke when using this product. Remove and wash contaminated clothing

and gloves, including the inside, before re-use.

Environmental exposure controls Local authorities should be advised if significant spillages cannot be contained. Do not allow

into any sewer, on the ground or into any body of water.

EN / AGHS Page 4/17

Product Name StablCal® Solution, <0.1 NTU **Revision Date** 26-Jan-2024

Page 5 / 17

Thermal hazards None under normal processing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Liquid

Appearanceaqueous solutionColorcolorlessOdorOdorlessOdor thresholdNot applicable

Property Values Remarks • Method

Molecular weight Not applicable

pH <= 8.5 @ 20 °C

Melting point / freezing point -5 °C / 23 °F

Initial boiling point and boiling range 101 °C / 213.8 °F

Evaporation rate 0.98 (water = 1)

Vapor pressure 24.002 mm Hg / 3.2 kPa at 25 °C / 77 °F

Relative vapor density 0.71

Specific gravity - VALUE 1 1.01

Partition coefficient No data available

Soil Organic Carbon-Water Partition

Coefficient

No data available

Autoignition temperature No data available

Decomposition temperatureNo data available

Dynamic viscosity No data available

Kinematic viscosity No data available

Solubility(ies)

Water solubility

| Water solubility classification | Water solubility_ | Water Solubility Temperature_ |
|---------------------------------|-------------------|-------------------------------|
| Soluble | > 1000 mg/L | 25 °C / 77 °F |

Solubility in other solvents

| Chemical Name_ | Solubility classification | <u>Solubility</u> | Solubility Temperature_ |
|----------------|---------------------------|-------------------|-------------------------|
| Acid | Soluble | > 1000 mg/L | 25 °C / 77 °F |

Other information

Metal Corrosivity

Steel Corrosion RateNo data availableAluminum Corrosion RateNo data available

Volatile Organic Compounds (VOC) Content

See ingredients information below

EN / AGHS Page 5/17

Product Name StablCal® Solution, <0.1 NTU **Revision Date** 26-Jan-2024

Page 6 / 17

| Chemical name | CAS No | Volatile organic compounds (VOC) content | CAA (Clean Air Act) |
|--|-----------|--|---------------------|
| 1,3,5,7-Tetraazatricyclo[3.3.1.1(3,7)]de | 100-97-0 | Not applicable | X |
| cane | | | |
| Sodium sulfate | 7757-82-6 | No data available | - |
| Formaldehyde | 50-00-0 | No data available | Χ |

Explosive properties

Upper explosion limitNot applicableLower explosion limitNot applicable

Flammable properties

Flash point No data available

Flammability Limit in Air

Upper flammability limit:No data availableLower flammability limit:No data available

Oxidizing properties No data available.

Bulk density Not applicable

10. STABILITY AND REACTIVITY

Reactivity

Not applicable.

Chemical stability

Stable under normal conditions.

Explosion data

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Possibility of hazardous reactions

None under normal processing.

Hazardous polymerization

Hazardous polymerization does not occur.

Conditions to avoid

None known based on information supplied.

Incompatible materials

Strong oxidizing agents, strong acids, and strong bases.

Hazardous decomposition products

Ammonia. Carbon monoxide. Formaldehyde. Nitrogen oxides. Sodium oxides. Sulfur oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

EN / AGHS Page 6/17

Product Name StablCal® Solution, <0.1 NTU **Revision Date** 26-Jan-2024

Page 7 / 17

Inhalation May cause sensitization in susceptible persons.

Eye contact No known effect based on information supplied.

Skin contact Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

May cause sensitization by skin contact.

Ingestion May cause additional affects as listed under "Inhalation".

Symptoms Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling

of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing.

Coughing and/ or wheezing. Itching. Rashes. Hives.

Acute toxicity

Based on available data, the classification criteria are not met

Mixture

No data available.

Ingredient Acute Toxicity Data

Test data reported below.

Oral Exposure Route

| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|--|-------------------------|---------------|---------------|-----------------------|--|
| Formaldehyde (<0.1%) CAS#: 50-00-0 | Rat LD ₅₀ | 100 mg/kg | None reported | None reported | GESTIS |

Dermal Exposure Route

| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|--|----------------------------|---------------|---------------|-----------------------|--|
| Formaldehyde (<0.1%) CAS#: 50-00-0 | Rabbit LD ₅₀ | 270 mg/kg | None reported | None reported | GESTIS |

Inhalation (Dust/Mist) Exposure Route

| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|--|-------------------------|---------------|---------------|-----------------------|--|
| Formaldehyde (<0.1%) CAS#: 50-00-0 | Rat LC ₅₀ | 0.578 mg/L | 4 hours | None reported | LOLI |

Unknown Acute Toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity.

Acute Toxicity Estimations (ATE)

The following values are calculated based on chapter 3.1 of the GHS document

| ATEmix (oral) | No information available |
|-------------------------------|--------------------------|
| ATEmix (dermal) | No information available |
| ATEmix (inhalation-dust/mist) | No information available |
| ATEmix (inhalation-vapor) | No information available |
| ATEmix (inhalation-gas) | No information available |

EN / AGHS Page 7/17

Product Name StablCal® Solution, <0.1 NTU Revision Date 26-Jan-2024 Page 8 / 17

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Mixture

No data available.

Ingredient Skin Corrosion/Irritation Data

Test data reported below.

| Chemical name | Test method | Species | Reported dose | Exposure time | Results | Key literature references and sources for data |
|--|-------------------------|---------|------------------|------------------|-------------------------------------|--|
| 1,3,5,7-Tetraazatricyc lo[3.3.1.1(3,7)]decane (<10%) CAS#: 100-97-0 | 1 | Rabbit | 500 mg | 4 hours | Not corrosive or irritating to skin | ECHA |
| Sodium sulfate (<1%) CAS#: 7757-82-6 | Standard Draize Test | Rabbit | 500 mg | 4 hours | Not corrosive or irritating to skin | ECHA |
| Formaldehyde (<0.1%) CAS#: 50-00-0 | Standard Draize Test | Human | 0.150 mg | 72 hours | Corrosive to skin | RTECS |

Serious eye damage/irritation

Based on available data, the classification criteria are not met.

Mixture

No data available.

Ingredient Eye Damage/Eye Irritation Data

Test data reported below.

| Chemical name | Test method | Species | Reported dose | Exposure time | Results | Key literature references and sources for data |
|--|-------------------------|---------|------------------|------------------|--|--|
| 1,3,5,7-Tetraazatricyc lo[3.3.1.1(3,7)]decane (<10%) CAS#: 100-97-0 | | Rabbit | 100 mg | 24 hours | Not corrosive or irritating to eyes | ECHA |
| Sodium sulfate (<1%) CAS#: 7757-82-6 | Standard Draize Test | Rabbit | 90 mg | 24 hours | Not corrosive or irritating to eyes | ECHA |
| Formaldehyde (<0.1%) CAS#: 50-00-0 | Rinse Test | Human | 1 ppm | 6 minutes | Corrosive to eyes | RTECS |

Respiratory or skin sensitization

May cause sensitization by inhalation. May cause sensitization by skin contact.

Mixture

No data available.

Ingredient Sensitization Data

Test data reported below.

Skin Sensitization Exposure Route

| Chemical name | Test method | Species | Results | Key literature references and sources for data |
|---|-------------|------------|-----------------------------------|--|
| 1,3,5,7-Tetraazatricyc lo[3.3.1.1(3,7)]decane | | Guinea pig | Confirmed to be a skin sensitizer | ECHA |

EN / AGHS Page 8/17

Product Name StablCal® Solution, <0.1 NTU **Revision Date** 26-Jan-2024 **Page** 9 / 17

| (<10%) CAS#: 100-97-0 | Sensitization | | | |
|--|---|------------|---------------------------------------|------|
| Sodium sulfate (<1%) CAS#: 7757-82-6 | OECD Test No. 406: Skin Sensitization | Guinea pig | Not confirmed to be a skin sensitizer | HSDB |
| Formaldehyde (<0.1%) CAS#: 50-00-0 | Patch test | Human | Confirmed to be a skin sensitizer | ERMA |

Respiratory Sensitization Exposure Route

| Chemical name | Test method | Species | Results | Key literature references and sources for data |
|--|---|------------|--|--|
| 1,3,5,7-Tetraazatricyc lo[3.3.1.1(3,7)]decane (<10%) CAS#: 100-97-0 | | Human | Confirmed to be a respiratory sensitizer | HSDB |
| Formaldehyde (<0.1%) CAS#: 50-00-0 | IgE Specific Immune Response Test | Guinea pig | Confirmed to be a respiratory sensitizer | CICAD |

STOT - single exposure

Based on available data, the classification criteria are not met.

Mixture

No data available.

Ingredient Specific Target Organ Toxicity Single Exposure Data

Test data reported below.

Oral Exposure Route

| Chemical name | Endpoint | Reported | Exposure | Toxicological effects | Key literature references and |
|---------------|----------|----------|---------------|----------------------------|-------------------------------|
| | type | dose | time | | sources for data |
| Formaldehyde | Human | 70 mg/kg | None reported | Gastrointestinal | RTECS |
| (<0.1%) | LDLo | | | Kidney, Ureter, or Bladder | |
| CAS#: 50-00-0 | | | | Liver | |
| | | | | Other changes | |
| | | | | Ulcerated stomach | |
| | | | | Other changes | |

STOT - repeated exposure

Based on available data, the classification criteria are not met.

Mixture

No data available.

Ingredient Specific Target Organ Toxicity Repeat Exposure Data

Test data reported below.

Oral Exposure Route

| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|--|---------------|---------------|---------------|-----------------------|--|
| 1,3,5,7-Tetraazatricyc lo[3.3.1.1(3,7)]decane (<10%) CAS#: 100-97-0 | | 80 mg/kg | None reported | None reported | Vendor SDS |

Inhalation (Dust/Mist) Exposure Route

EN / AGHS Page 9/17

Product Name StablCal® Solution, <0.1 NTU Revision Date 26-Jan-2024 Page 10 / 17

| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|------------------------|---------------|-----------------------|---------------|----------------------------------|--|
| 1,3,5,7-Tetraazatricyc | Rat | 350 mg/m ³ | 21 days | Kidney, Ureter, or Bladder | RTECS |
| lo[3.3.1.1(3,7)]decane | TCLo | | | Urine volume decreased or | |
| (<10%) | | | | anuria | |
| CAS#: 100-97-0 | | | | Nutritional and Gross | |
| | | | | Metabolic | |
| | | | | Weight loss or decreased weight | |
| | | | | gain | |
| | | | | Biochemical | |
| | | | | Enzyme inhibition, induction, or | |
| | | | | change in blood or tissue levels | |
| | | | | (true cholinesterase) | |

Inhalation (Vapor) Exposure Route

| Chemical name | Endpoint | Reported | Exposure | Toxicological effects | Key literature references and |
|---------------|----------|------------|----------|-----------------------|-------------------------------|
| | type | dose | time | | sources for data |
| Formaldehyde | Human | 0.017 mg/L | 0.5 days | Eye | RTECS |
| (<0.1%) | TCLo | | | Lungs, Thorax, or | |
| CAS#: 50-00-0 | | | | Respiration | |
| | | | | Lacrimation | |
| | | | | Other changes | |

Carcinogenicity

Based on available data, the classification criteria are not met.

Mixture

No data available.

Ingredient Carcinogenicity Data

Test data reported below.

| Chemical name | CAS No | ACGIH | IARC | NTP | OSHA |
|-----------------------------|-----------|-------|---------|-------|------|
| 1,3,5,7-Tetraazatricyclo[3. | 100-97-0 | - | - | - | - |
| 3.1.1(3,7)]decane | | | | | |
| Sodium sulfate | 7757-82-6 | - | - | - | - |
| Formaldehyde | 50-00-0 | A1 | Group 1 | Known | X |

Legend

| ACGIH (American Conference of Governmental Industrial Hygienists) | A2 - Suspected Human Carcinogen |
|---|----------------------------------|
| IARC (International Agency for Research on Cancer) | Group 1 - Carcinogenic to Humans |
| NTP (National Toxicology Program) | Known - Known Carcinogen |
| OSHA | X - Present |

Inhalation (Vapor) Exposure Route

| ſ | Chemical name | Endpoint | Reported | Exposure | Toxicological effects | Key literature references and |
|---|--|----------|----------|----------|----------------------------|-------------------------------|
| L | | type | dose | time | | sources for data |
| | Formaldehyde (<0.1%) CAS#: 50-00-0 | Rat | 15 mg/L | 78 weeks | Olfaction Tumors | RTECS |

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Mixture invitro Data

No data available.

Substance invitro Data

EN / AGHS Page 10/17

Product Name StablCal® Solution, <0.1 NTU Revision Date 26-Jan-2024 Page 11 / 17

Test data reported below.

| Chemical name | Test | Cell Strain | Reported dose | Exposure time | Results | Key literature references and sources for data |
|--|------|-----------------|------------------|------------------|---------------------------------------|--|
| 1,3,5,7-Tetraazatricyc lo[3.3.1.1(3,7)]decane (<10%) CAS#: 100-97-0 | , , | Human HeLa Cell | 1 mmol/L | None reported | Positive test result for mutagenicity | RTECS |

Mixture invivo Data

No data available.

Substance invivo Data

Test data reported below.

Oral Exposure Route

| Chemical name | Test | Species | Reported dose | Exposure time | Results | Key literature references and sources for data |
|--|------|---------|---------------|------------------|---------------------------------------|--|
| 1,3,5,7-Tetraazatricyc lo[3.3.1.1(3,7)]decane (<10%) CAS#: 100-97-0 | | Mouse | 25000 mg/kg | None reported | Positive test result for mutagenicity | RTECS |

Inhalation (Vapor) Exposure Route

| Chemical name | Test | Species | Reported dose | Exposure time | Results | Key literature references and sources for data |
|--|-------------------|---------|---------------|---------------|---------------------------------------|--|
| Formaldehyde (<0.1%) CAS#: 50-00-0 | Micronucleus test | Human | .000985 mg/L | 8.5 years | Positive test result for mutagenicity | RTECS |

Reproductive toxicity

Based on available data, the classification criteria are not met.

Mixture

No data available.

Ingredient Reproductive Toxicity Data

Test data reported below.

Oral Exposure Route

| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|-----------------|---------------|---------------|---------------|----------------------------|--|
| Sodium sulfate | Mouse | 14000 mg/kg | 4 days | Effects on Newborn | RTECS |
| (<1%) | TDLo | | | Other neonatal measures or | |
| CAS#: 7757-82-6 | | | | effects | |

Inhalation (Vapor) Exposure Route

| Chemical name | Endpoint | Reported | Exposure | Toxicological effects | Key literature references and |
|---------------|----------|----------|----------|---------------------------------|-------------------------------|
| | type | dose | time | | sources for data |
| Formaldehyde | Rat | 40 mg/L | 14 days | Effects on Embryo or Fetus | RTECS |
| (<0.1%) | TCLo | _ | - | Fetotoxicity (except death e.g. | |
| CAS#: 50-00-0 | | | | stunted fetus) | |

Aspiration hazard

EN / AGHS Page 11/17

Product Name StablCal® Solution, <0.1 NTU **Revision Date** 26-Jan-2024

Page 12 / 17

Based on available data, the classification criteria are not met.

12. ECOLOGICAL INFORMATION

Ecotoxicity Based on available data, the classification criteria are not met.

Unknown aquatic toxicity 0% of the mixture consists of components(s) of unknown hazards to the aquatic

environment.

Mixture

Aquatic Acute ToxicityNo data available.

Aquatic Chronic Toxicity

No data available.

Substance

Aquatic Acute Toxicity

Test data reported below.

Fish

| Chemical name | Exposure time | Species | Endpoint type | Reported dose | Key literature references and sources for data |
|--|---------------|------------------|---------------|---------------|--|
| Sodium sulfate (<1%) CAS#: 7757-82-6 | 96 hours | None reported | LC50 | 56 mg/L | IUCLID |
| Formaldehyde (<0.1%) CAS#: 50-00-0 | 96 hours | Morone saxatilis | LC50 | 6.7 mg/L | PEEN |

Crustacea

| Chemical name | Exposure time | Species | Endpoint type | Reported dose | Key literature references and sources for data |
|--|---------------|---------------|---------------|---------------|--|
| Sodium sulfate (<1%) CAS#: 7757-82-6 | 48 Hours | Daphnia magna | EC50 | 3150 mg/L | IUCLID |
| Formaldehyde (<0.1%) CAS#: 50-00-0 | 48 Hours | Daphnia pulex | EC50 | 5.8 mg/L | PEEN |

Aquatic Chronic Toxicity

No data available.

Persistence and degradability

Mixture

No data available.

Mixture

No data available.

Partition coefficient No data available

Mobility

Soil Organic Carbon-Water Partition Coefficient No data available

EN / AGHS Page 12/17

Product Name StablCal® Solution, <0.1 NTU **Revision Date** 26-Jan-2024

Page 13 / 17

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused

Dispose of in accordance with local regulations. Dispose of waste in accordance with

products environmental legislation.

Contaminated packaging Do not reuse empty containers.

US EPA Waste Number U122

| Chemical name | RCRA | RCRA - Basis for Listing | RCRA - D Series Wastes | RCRA - U Series Wastes |
|---------------|------|--------------------------|------------------------|------------------------|
| Formaldehyde | U122 | Included in waste | - | U122 |
| 50-00-0 | | streams: K009, K010, | | |
| | | K038, K040, K156, K157 | | |

14. TRANSPORT INFORMATION

DOT Not regulated

TDG Not regulated

<u>IATA</u> Not regulated

IMDG Not regulated

Note: No special precautions necessary.

Additional information

15. REGULATORY INFORMATION

National Inventories

TSCA Complies DSL/NDSL Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

International Inventories

EINECS/ELINCS Complies Complies **ENCS IECSC** Complies **KECL** Complies **PICCS** Complies Complies **TCSI** Complies **AICS** Complies **NZIoC**

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

EN / AGHS Page 13/17

Product Name StablCal® Solution, <0.1 NTU **Revision Date** 26-Jan-2024

Page 14 / 17

PICCS - Philippines Inventory of Chemicals and Chemical Substances

TCSI - Taiwan Chemical Substances Inventory
AICS - Australian Inventory of Chemical Substances
NZIOC - New Zealand Inventory of Chemicals

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical name | SARA 313 - Threshold Values % |
|-----------------------------------|-------------------------------|
| Formaldehyde (CAS #: 50-00-0) | 0.1 |
| SARA 311/312 Hazard Categories | |
| Acute health hazard | Yes |
| Chronic Health Hazard | Yes |
| Fire hazard | No |
| Sudden release of pressure hazard | No |
| Reactive Hazard | No |

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

| Chemical name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---------------|--------------------------------|------------------------|------------------------------|-------------------------------|
| Formaldehyde | 100 lb | - | - | X |
| 50-00-0 | | | | |

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

| Chemical name | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ) |
|---------------|--------------------------|----------------|--------------------------|
| Formaldehyde | 100 lb | 100 lb | RQ 100 lb final RQ |
| 50-00-0 | | | RQ 45.4 kg final RQ |

U.S. - Department of Homeland Security - Chemical Facility Anti-Terrorism Standards (CFATS) - Security Issues

| Chemical name | U.S Department of Homeland Security - Chemical Facility Anti-Terrorism Standards (CFATS) - Security Issues |
|-------------------------|--|
| Formaldehyde (<0.1%) | Release - Toxic (solution) |
| CAS#: 50-00-0 | |

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

| Chemical name | California Proposition 65 | |
|-------------------------------|---------------------------|--|
| Formaldehyde (CAS #: 50-00-0) | Carcinogen | |

WARNING: This product can expose you to chemicals including Formaldehyde, which is known to the State of California to cause cancer.

For more information, go to http://www.P65Warnings.ca.gov

IMERC: Not applicable

EN / AGHS Page 14/17

Product Name StablCal® Solution, <0.1 NTU **Revision Date** 26-Jan-2024

Page 15 / 17

U.S. State Right-to-Know Regulations

This product may contain substances regulated by state right-to-know regulations.

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|-----------------------------------|------------|---------------|--------------|
| 1,3,5,7-Tetraazatricyclo[3.3.1.1(| X | - | - |
| 3,7)]decane | | | |
| 100-97-0 | | | |
| Sodium sulfate | - | X | X |
| 7757-82-6 | | | |
| Formaldehyde | X | X | X |
| 50-00-0 | | | |

U.S. EPA Label Information

| Chemical name | FIFRA | FDA |
|--|----------|-----------------|
| 1,3,5,7-Tetraazatricyclo[3.3.1.1(3,7)]decane | 180.0910 | - |
| Sodium sulfate | - | 21 CFR 186.1797 |

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

Special Comments

None

Additional information

Global Automotive Declarable Substance List (GADSL)

| Chemical name | Global Automotive Declarable Substance List Classifications | Global Automotive Declarable Substance List Thersholds |
|--|---|--|
| 1,3,5,7-Tetraazatricyclo[3.3.1.1(3,7)]decane 100-97-0 | Declarable Substance (FI) | 0.1 % |
| Formaldehyde | Prohibited Substance (FI) | 0.1 % |
| 50-00-0 | Prohibited Substance (LR) | |
| | Declarable Substance (LR) | |
| | Declarable Substance (FI) | |

NFPA and HMIS Classifications

| | NFPA | Health hazards - 2 | Flammability - 0 | Instability - 0 | Physical and chemical properties - |
|---|------|--------------------|------------------|----------------------|------------------------------------|
| | HMIS | Health hazards - 2 | Flammability - 0 | Physical hazards - 0 | Personal protection - |
| | | - * | | | X |
| - | | | | | - I |

Key or legend to abbreviations and acronyms used in the safety data sheet

| ACGIH | ACGIH (American Conference of Governmental Industrial Hygienists) |
|-------|---|
| ATSDR | ATSDR (Agency for Toxic Substances and Disease Registry) |
| CCRIS | CCRIS (Chemical Carcinogenesis Research Information System) |
| CDC | CDC (Center for Disease Control) |
| CEPA | CEPA (Canadian Environmental Protection Agency) |
| CICAD | CICAD (Concise International Chemical Assessment Documents) |
| ECHA | ECHA (The European Chemicals Agency) |
| EEA | EEA (European Environment Agency) |
| EPA | EPA (Environmental Protection Agency) |
| ERMA | ERMA (New Zealands Environmental Risk Management Authority) |

EN / AGHS Page 15/17

Product Name StablCal® Solution, <0.1 NTU

Revision Date 26-Jan-2024

Page 16 / 17

ECOSARS Estimation through ECOSARS v1.11 part of the Estimation Programs Interface (EPI) Suite™

FDA FDA (Food & Drug Administration)

GESTIS GESTIS (Information System on Hazardous Substances of the German Social Accident

Insurance)

HSDB (Hazardous Substances Data Bank)

INERIS
INERIS (The National Industrial Environment and Risks Institute)
IPCS INCHEM
IPCS INCHEM (International Programme on Chemical Safety)
IUCLID (The International Uniform Chemical Information Database)
NITE Japan National Institute of Technology and Evaluation (NITE)

NIH (National Institutes of Health)

NIOSH NIOSH (National Institute for Occupational Safety and Health)
LOLI LOLI (List of Lists - An International Chemical Regulatory Database)

NDF no data

NICNAS Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH IDLH Immediately Dangerous to Life or Health

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

PEEN (Pan European Ecological Network)

RTECS (Registry of Toxic Effects of Chemical Substances)
SIDS (Screening Information Dataset) for High Volume Chemicals

SYKE The Finnish Environment Institute (SYKE)
USDA USDA (United States Department of Agriculture)
USDC USDC (United States Department of Commerce)

WHO (World Health Organization)

Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

MAC Maximum Allowable Concentration Ceiling Ceiling Limit Value

X Listed Vacated These values have no official status. The only

binding levels of contaminants are those listed in the final OSHA PEL. These lists are for reference purposes only. Please note that some reference state regulations of these "liberated" exposure limits in their state

regulations.

SKN* Skin designation SKN+ Skin sensitization
RSP+ Respiratory sensitization ** Hazard Designation
C Carcinogen R Reproductive toxicant

M mutagen

Prepared By Hach Product Compliance Department

Issue Date 25-Jan-2021

Revision Date 26-Jan-2024

Revision Note None

Disclaimer

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

HACH COMPANY©2023

EN / AGHS Page 16/17

Product Name StablCal® Solution, <0.1 NTU Revision Date 26-Jan-2024 Page 17 / 17

End of Safety Data Sheet

EN / AGHS Page 17/17