

# SAFETY DATA SHEET

**Issue Date** 25-Jan-2021 **Revision Date** 26-Jan-2024 **Version** 8.1 **Page** 1 / 17

## 1. IDENTIFICATION

**Product identifier** 

Product Name StablCal® Standard, 100 NTU

Other means of identification

Product Code(s) 2660249

Safety data sheet number M03412

Recommended use of the chemical and restrictions on use

**Recommended 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**

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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

#### Substance

Not applicable

#### **Mixture**

Chemical Family Mixture.

**Chemical nature** aqueous 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%	1
Sodium sulfate	7757-82-6	<1%	-
Formaldehyde	50-00-0	<0.1%	-
Diammonium sulfate	7783-20-2	<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

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clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

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

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

May cause sensitization by skin contact.

Hazardous combustion products This material will not burn. Ammonia. Carbon monoxide. Formaldehyde. Nitrogen oxides

(NOx).

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. Notice** Only 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 sections** See section 8 for more information. See section 13 for more information.

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## 7. HANDLING AND STORAGE

#### Precautions for safe handling

Advice on safe handling Provide extract ventilation to points where emissions occur. Remove contaminated clothing

and shoes. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this

product. 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/m³ 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

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

Thermal hazards None under normal processing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

## Information on basic physical and chemical properties

Physical state

Liquid

Appearance

Turbid solution aqueous solution

Color

white

No data available

Odor

Odorless

Odor threshold

Remarks • Method

Molecular weight

No data available

Values

рН

**Property** 

8.26

@ 20 °C

Melting point / freezing point

~ 0 °C / 32 °F

Initial boiling point and boiling range

~ 100 °C / 212 °F

**Evaporation rate** 

1 (water = 1)

Vapor pressure

17.477 mm Hg  $\,/\,$  2.33 kPa at 20 °C  $\,/\,$  68 °F

Relative vapor density

0.62

Specific gravity - VALUE 1

1.02

Partition coefficient

Not applicable

Soil Organic Carbon-Water Partition Coefficient

Not applicable

Autoignition temperature

Decomposition temperature

No data available

No 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	Solubility	Solubility Temperature
None reported	No information available	No data available	No information available

#### Other information

## **Metal Corrosivity**

Steel Corrosion RateNo data availableAluminum Corrosion RateNo data available

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### **Volatile Organic Compounds (VOC) Content**

No information available See ingredients information below

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	Χ
cane			
Sodium sulfate	7757-82-6	No data available	-
Formaldehyde	50-00-0	No data available	X
Diammonium sulfate	7783-20-2	No data available	_

### **Explosive properties**

Upper explosion limitNo data availableLower explosion limitNo data available

Flammable properties

Flash point Not applicable

Flammability Limit in Air

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

Oxidizing properties No data available.

Bulk density

No data available

## 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**

None under normal processing.

#### 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

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### Information on likely routes of exposure

### **Product Information**

**Inhalation** May cause sensitization in susceptible persons.

**Eye contact** No known effect based on information supplied.

**Skin contact** May cause sensitization by skin contact. Repeated or prolonged skin contact may cause

allergic reactions with susceptible persons.

**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			Toxicological effects	Key literature references and sources for data
Formaldehyde (<0.1%) CAS#: 50-00-0	Rat LD₅o	100 mg/kg	None reported	None reported	GESTIS
Diammonium sulfate (<0.1%) CAS#: 7783-20-2	Rat LD <sub>50</sub>	3 3 1 2 2 3 1		None reported	GESTIS

### **Dermal Exposure Route**

Chemical name	Endpoint Reported type dose				Exposure time	Toxicological effects	Key literature references and sources for data
Formaldehyde (<0.1%) CAS#: 50-00-0	Rabbit LD50	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%)	Rat LC <sub>50</sub>	0.578 mg/L	4 hours	None reported	LOLI
CAS#: 50-00-0					

#### **Unknown Acute Toxicity**

3.731E-05% 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

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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

### 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		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
Diammonium sulfate (<0.1%) CAS#: 7783-20-2	Standard Draize Test	Rabbit	800 mg	20 hours	Not corrosive or irritating to skin	ECHA

## 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
Diammonium sulfate (<0.1%) CAS#: 7783-20-2	Standard Draize Test	Rabbit	0.050 mL	None reported	Not corrosive or irritating to eyes	ECHA

## Respiratory or skin sensitization

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

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### 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 (<10%) CAS#: 100-97-0		Guinea pig	Confirmed to be a skin sensitizer	ECHA
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%)	LD∟₀			Kidney, Ureter, or Bladder	
CAS#: 50-00-0				Liver	
				Other changes	
				Ulcerated stomach	
				Other changes	
Diammonium sulfate	Man	1500 mg/kg	None reported	Gastrointestinal	RTECS
(<0.1%)	$TD_Lo$		'	Gas	
CAS#: 7783-20-2					

## **STOT - repeated exposure**

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

### **Mixture**

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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

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### Inhalation (Dust/Mist) 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	Rat TC⊾	350 mg/m <sup>3</sup>	21 days	Kidney, Ureter, or Bladder Urine volume decreased or anuria 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 type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Formaldehyde (<0.1%) CAS#: 50-00-0	Human TC∟₀	0.017 mg/L	0.5 days	Eye Lungs, Thorax, or Respiration Lacrimation Other changes	RTECS

## **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
Diammonium sulfate	7783-20-2	-	-	-	-

### 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

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OSHA X - Present

## Inhalation (Vapor) Exposure Route

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

### **Germ cell mutagenicity**

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

## Mixture invitro Data

No data available.

#### Substance invitro Data

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.

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#### **Oral Exposure Route**

	Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Ī	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 type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Ī	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**

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 4E-05% of the mixture consists of components(s) of unknown hazards to the aquatic

environment.

### **Mixture**

Aquatic Acute Toxicity No data available.

**Aquatic Chronic Toxicity** 

No data available.

### **Substance**

## **Aquatic Acute Toxicity**

Test data reported below.

### Fish

Chemical name	Exposure Species time		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
Diammonium sulfate (<0.1%) CAS#: 7783-20-2	96 hours	Oncorhynchus mykiss	LC <sub>50</sub>	36.7 mg/L	GESTIS

### 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	48 Hours	Daphnia pulex	EC <sub>50</sub>	5.8 mg/L	PEEN

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(<0.1%) CAS#: 50-00-0					
Diammonium sulfate (<0.1%) CAS#: 7783-20-2	48 Hours	None reported	LC <sub>50</sub>	14 mg/L	GESTIS

### **Aquatic Chronic Toxicity**

No data available.

### Persistence and degradability

**Mixture** 

No data available.

Mixture

No data available.

Partition coefficient Not applicable

**Mobility** 

Soil Organic Carbon-Water Partition Coefficient Not applicable

Other adverse effects
No information available

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

Waste from residues/unused

products

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

environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

US EPA Waste Number Not applicable, 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		ļ.

## 14. TRANSPORT INFORMATION

**DOT** Not regulated

TDG Not regulated

<u>IATA</u> Not regulated

<u>IMDG</u> Not regulated

**Note:** No special precautions necessary.

**Additional information** 

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## 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 Does not comply **ENCS IECSC** Complies Complies **KECL PICCS** Does not comply **TCSI** Complies 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

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	
Diammonium sulfate (CAS #: 7783-20-2)	1.0	

SARA 311/312 Hazard Categories

Acute health hazard Yes
Chronic Health Hazard No
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 50-00-0	100 lb	-	-	Х

### **CERCLA**

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

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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 cause cancer.

For more information, go to <a href="http://www.P65Warnings.ca.gov">http://www.P65Warnings.ca.gov</a>

IMERC: Not applicable

## 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			
Diammonium sulfate	-	X	X
7783-20-2			

## **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
Diammonium sulfate	180.0910	21 CFR 184.1143

# 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 %

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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 (Agency for Toxic Substances and Disease Registry)
CCRIS (Chemical Carcinogenesis Research Information System)

CDC (Center for Disease Control)

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 (New Zealands Environmental Risk Management Authority)

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 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 (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 RTECS (Registry of Toxic Effects of Chemical Substances)
SIDS 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

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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.

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**End of Safety Data Sheet** 

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