

# SAFETY DATA SHEET

Issue Date 04-May-2021

Product identifier

Revision Date 04-May-2021 Version 4.9

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### **1. IDENTIFICATION**

Product Name	Fluoride Standard Solution	1.00 mg/L as F
Other means of identification Product Code(s)	29149	
Safety data sheet number	M00606	

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 not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

#### Hazards not otherwise classified (HNOC) Not applicable

#### Label elements

Signal word None

#### Hazard statements

The product contains no substances which at their given concentration, are considered to be hazardous to health

# Other Hazards Known

None

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Substance Not applicable

<u>Mixture</u>

Chemical Family Chemical nature Mixture. aqueous solution.

CAS No	Percent Range	HMRIC #
50-00-0	<0.1%	-
67-56-1	<0.1%	-
7681-49-4	<0.01%	-
	67-56-1	50-00-0 <0.1% 67-56-1 <0.1%

# 4. FIRST AID MEASURES

#### **Description of first aid measures**

General advice	No hazards which require special first aid measures. Use first aid treatment according to the nature of the injury.		
Inhalation	Remove to fresh air.		
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.		
Skin contact	Wash skin with soap and water.		
Ingestion	Clean mouth with water and drink afterwards plenty of water.		
Most important symptoms and effects, both acute and delayed			
Symptoms	See Section 11 for additional Toxicological Information.		
Indication of any immediate medical attention and special treatment needed			
Note to physicians	Treat symptomatically.		
5. FIRE-FIGHTING MEASURES			

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable Extinguishing Media	Caution: Use of water spray when fighting fire may be inefficient.
Specific hazards arising from the chemical	No information available.
Hazardous combustion products	No information available.
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 ec	quipment and emergency procedures
Personal precautions	Ensure adequate ventilation.
Environmental precautions	
Environmental precautions	See Section 12 for additional ecological information.
Methods and material for containm	ent 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.

# 7. HANDLING AND STORAGE

Precautions for safe handling				
Advice on safe handling	Handle in accordance with good industrial hygiene and safety practice.			
Conditions for safe storage, including any incompatibilities				
Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place.			
Flammability class	Not applicable			

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control parameters

#### **Exposure Guidelines**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Formaldehyde	STEL: 0.3 ppm	TWA: 0.75 ppm	IDLH: 20 ppm
CAS#: 50-00-0	TWA: 0.1 ppm	(vacated) TWA: 3 ppm	Ceiling: 0.1 ppm 15 min
		(vacated) STEL: 10 ppm	TWA: 0.016 ppm
		(vacated) Ceiling: 5 ppm	
		STEL: 2 ppm	
Methanol	STEL: 250 ppm	TWA: 200 ppm	IDLH: 6000 ppm
CAS#: 67-56-1	TWA: 200 ppm	TWA: 260 mg/m <sup>3</sup>	TWA: 200 ppm
	S*	(vacated) TWA: 200 ppm	TWA: 260 mg/m <sup>3</sup>
		(vacated) TWA: 260 mg/m <sup>3</sup>	STEL: 250 ppm
		(vacated) STEL: 250 ppm	STEL: 325 mg/m <sup>3</sup>
		(vacated) STEL: 325 mg/m <sup>3</sup>	

		(vacated) SKN*			
Sodium fluoride	TWA: 2.5 mg/m <sup>3</sup> F	TWA: 2.5 mg/m <sup>3</sup>	IDLH: 250 mg/m <sup>3</sup> F		
CAS#: 7681-49-4		(vacated) TWA: 2.5 mg/m <sup>3</sup>	TWA: 2.5 mg/m <sup>3</sup> F		
Appropriate engineering controls	-				
Engineering Controls	Showers				
	Eyewash stations Ventilation systems. Technic	al measures and appropriate w	orking operations should be		
	given priority over the use of p	ersonal protective equipment.	The type of protective		
		ccording to the concentration a	nd amount of the dangerous		
	substance at the specific work	place.			
Individual protection measures, su	ch as personal protective equ	ipment			
Respiratory protection	No protective equipment is ne	eded under normal use condition			
		exceeded or irritation is experienced, ventilation and evacuation may be required. Ensure			
	adequate ventilation.				
Hand Protection	Wear suitable gloves. Barrier creams may help to protect the exposed areas of skin.				
		or to use. The selected protectiv			
		2016/425 and the standard EN rubber or nitrile rubber categor			
	374-1:2016.	rubber of filline rubber ealeger			
Eye/face protection	Wear safety glasses with side	shields (or goggles).			
Skin and body protection	No special protective equipme	ent required. Avoid contact with	n eyes, skin and clothing.		
General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practice.				
General Hygiene Considerations	Fiandie in accordance with go	ou industrial hygiene and safety	practice.		
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.				
	allow into any sewer, on the g	round of into any body of water			
Thermal hazards	None under normal processing	g.			
		-			

# 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

Physical state Appearance Odor	aqueous solution Odorless	Liquid		Color Odor threshold	colorless No informat	ion available
Property_			Values			Remarks • Method
Molecular weight	:		No data availat	ble		
рН			~ 7			@ 20 °C
Melting point/free	ezing point		~ 0 °C / 32	2°F		
Boiling point / bo	iling range		~ 100 °C /	212 °F		
Evaporation rate			0.76 (water = 1	)		
Vapor pressure			23.777 mm Hg	/ 3.17 kPa at 2	5 °C / 77 °F	-
Relative vapor de	ensity		0.62			
Specific gravity (	water = 1 / air = 1)		0.986			

Partition Coefficient (n-octanol/water)	Not applicable
Soil Organic Carbon-Water Partition Coefficient	Not applicable
Autoignition temperature	No data available
Decomposition temperature	No information available
Dynamic viscosity	No information available
Kinematic viscosity	No information 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 Rate	
Aluminum Corrosion Rate	

No	data	available
No	data	available

# Volatile Organic Compounds (VOC) Content

See ingredients information below

Chemical name	CAS No	Volatile organic compounds (VOC) content	CAA (Clean Air Act)
Formaldehyde	50-00-0	No data available	Х
Methanol	67-56-1	100%	Х
Sodium fluoride	7681-49-4	Not applicable	-

#### **Explosive properties**

Upper explosion limit Lower explosion limit	Not applicable Not applicable
Flammable properties	
Flash point	No data available
Flammability Limit in Air Upper flammability limit: Lower flammability limit:	No data available 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

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

None known based on information supplied.

## **11. TOXICOLOGICAL INFORMATION**

#### Information on likely routes of exposure

#### **Product Information**

Inhalation	No known effect based on information supplied.
Eye contact	No known effect based on information supplied.
Skin contact	No known effect based on information supplied.
Ingestion	No known effect based on information supplied.
Symptoms	No information available.

#### Acute toxicity

Based on available data, the classification criteria are not met

#### Product Acute Toxicity Data No data available.

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# 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 LD₅₀	100 mg/kg	None reported	None reported	GESTIS (Information System on Hazardous Substances of the German Social Accident

					Insurance)
Methanol (<0.1%) CAS#: 67-56-1	None reported	None reported	None reported	None reported	No information available
Sodium fluoride (<0.01%) CAS#: 7681-49-4	Rat LD₅o	52 mg/kg	None reported	None reported	GESTIS (Information System on Hazardous Substances of the German Social Accident Insurance)

#### 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 LD₅₀	270 mg/kg	None reported	None reported	GESTIS (Information System on Hazardous Substances of the German Social Accident Insurance)
Methanol (<0.1%) CAS#: 67-56-1	None reported	None reported	None reported	None reported	No information available
Sodium fluoride (<0.01%) CAS#: 7681-49-4	Rat LD50	175 mg/kg	None reported	None reported	ERMA (New Zealands Environmental Risk Management Authority)

#### 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 LC₅₀	0.578 mg/L	4 hours	None reported	LOLI
Methanol (<0.1%) CAS#: 67-56-1	None reported	None reported	None reported	None reported	No information available

#### Inhalation (Vapor) Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Methanol (<0.1%) CAS#: 67-56-1	None reported	None reported	None reported	None reported	No information available

#### Unknown Acute Toxicity

0.0001% of the mixture consists of ingredient(s) of unknown toxicity.

#### Acute Toxicity Estimations (ATE)

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.

#### Product Skin Corrosion/Irritation Data

No data available.

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#### 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
Formaldehyde (<0.1%) CAS#: 50-00-0	Standard Draize Test	Human	0.150 mg	72 hours	Corrosive to skin	RTECS (Registry of Toxic Effects of Chemical Substances)
Methanol (<0.1%) CAS#: 67-56-1	OECD Test 439: In Vitro Skin Irritation: Reconstructed Human Epidermis (Rhe) Test Method		None reported	20 hours	Not corrosive or irritating to skin	ECHA (The European Chemicals Agency)

#### Serious eye damage/irritation

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

#### Product Serious Eye Damage/Eye Irritation Data

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
Formaldehyde (<0.1%) CAS#: 50-00-0	Rinse Test	Human	1 ppm	6 minutes	Corrosive to eyes	RTECS (Registry of Toxic Effects of Chemical Substances)
Methanol (<0.1%) CAS#: 67-56-1	OECD Test 439: In Vitro Skin Irritation: Reconstructed Human Epidermis (Rhe) Test Method		0.05 mL	24 hours	Not corrosive or irritating to eyes	ECHA (The European Chemicals Agency)
Sodium fluoride (<0.01%) CAS#: 7681-49-4	Standard Draize Test	Rabbit	20 mg	24 hours	Eye irritant	RTECS (Registry of Toxic Effects of Chemical Substances)

# Respiratory or skin sensitization

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

#### **Product Sensitization Data**

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
Formaldehyde (<0.1%) CAS#: 50-00-0	Patch test	Human	Confirmed to be a skin sensitizer	ERMA (New Zealands Environmental Risk Management Authority)
Methanol (<0.1%) CAS#: 67-56-1	OECD Test No. 406: Skin Sensitization	Guinea pig	Not confirmed to be a skin sensitizer	ECHA (The European Chemicals Agency)
Sodium fluoride	OECD Test No.	Guinea pig	Not confirmed to be a skin sensitizer	ECHA (The European Chemicals

(<0.01%)	406: Skin		Agency)
CAS#: 7681-49-4	Sensitization		

#### **Respiratory Sensitization Exposure Route**

Chemical name	Test method	Species	Results	Key literature references and sources for data
Formaldehyde	IgE Specific	Guinea pig	Confirmed to be a respiratory	CICAD (Concise International
(<0.1%)	Immune Response	-	sensitizer	Chemical Assessment Documents)
CAS#: 50-00-0	Test			

#### STOT - single exposure

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

#### **Product Specific Target Organ Toxicity Single Exposure Data** No data available.

#### **Ingredient Specific Target Organ Toxicity Single 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
Formaldehyde (<0.1%)	Human LD∟₀	70 mg/kg	None reported	Gastrointestinal Kidney, Ureter, or Bladder	RTECS (Registry of Toxic Effects of Chemical
CAS#: 50-00-0				Liver Other changes Ulcerated stomach Other changes	Substances)
Methanol (<0.1%) CAS#: 67-56-1	Human LD∟₀	143 mg/kg	None reported	Lungs, Thorax, or Respiration Dyspnea	RTECS (Registry of Toxic Effects of Chemical Substances)
Sodium fluoride (<0.01%) CAS#: 7681-49-4	Human TD∟₀	0.214 mg/kg	None reported	Gastrointestinal Changes in structure or function of salivary glands Hypermotility Diarrhea	RTECS (Registry of Toxic Effects of Chemical Substances)

#### Inhalation (Vapor) Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Methanol	Human	300 mg/L	None	Lungs, Thorax, or	RTECS (Registry of Toxic
(<0.1%)	TCLo	-	reported	Respiration	Effects of Chemical
CAS#: 67-56-1				Other changes	Substances)

#### STOT - repeated exposure

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

**Product Specific Target Organ Toxicity Repeat Dose Data** No data available.

**Ingredient Specific Target Organ Toxicity Repeat 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

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Methanol (<0.1%) CAS#: 67-56-1	Monkey	2340 mg/kg	3 days	None reported	ECHA (The European Chemicals Agency)
Sodium fluoride (<0.01%) CAS#: 7681-49-4	Rat TD⊾o	420 mg/kg	42 days	Brain and Coverings Other degenerative changes Behavioral Somnolence (general depressed activity) Blood Changes in serum composition (e.g. TP, bilirubin, cholesterol)	RTECS (Registry of Toxic Effects of Chemical Substances)

#### Inhalation (Dust/Mist) Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium fluoride (<0.01%) CAS#: 7681-49-4	Rat TC⊾₀	1.0 mg/L	119 days	Biochemical Other degenerative changes Kidney, Ureter, or Bladder Other changes in urine composition Musculoskeletal Changes in teeth and supporting structures	RTECS (Registry of Toxic Effects of Chemical Substances)

#### 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 (Registry of Toxic Effects of Chemical Substances)

<u>Carcinogenicity</u> Based on available data, the classification criteria are not met.

#### **Product Carcinogenicity Data**

No data available.

#### **Ingredient Carcinogenicity Data**

Test data reported below.

Chemical name	CAS No	ACGIH	IARC	NTP	OSHA
Formaldehyde	50-00-0	A1	Group 1	Known	Х
Methanol	67-56-1	-	-	-	-
Sodium fluoride	7681-49-4	-	Group 3	-	Х

#### Legend

ACGIH (American Conference of Governmental Industrial Hygienists)	Does not apply
IARC (International Agency for Research on Cancer)	Group 3 - Not classifiable as a human
	carcinogen
NTP (National Toxicology Program)	Does not apply
OSHA (Occupational Safety and Health Administration of the US Department of	X - Present
Labor)	

#### **Oral Exposure Route**

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium fluoride (<0.01%) CAS#: 7681-49-4	Mouse TD∟₀	14 mg/kg	43 weeks	Skin and Appendages Tumors	RTECS (Registry of Toxic Effects of Chemical Substances)

#### Inhalation (Vapor) Exposure Route

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

#### Germ cell mutagenicity

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

#### Product Germ Cell Mutagenicity invitro Data

No data available.

#### Ingredient Germ Cell Mutagenicity invitro Data

Test data reported below.

Chemical name	Test	Cell Strain	Reported dose	Exposure time	Results	Key literature references and sources for data
Methanol (<0.1%) CAS#: 67-56-1	DNA inhibition	Human Iymphocyte	300 mmol/L	None reported	Positive test result for mutagenicity	RTECS (Registry of Toxic Effects of Chemical Substances)
Sodium fluoride (<0.01%) CAS#: 7681-49-4	Cytogenetic analysis	Human fibroblast	20 mg/L	None reported	Positive test result for mutagenicity	RTECS (Registry of Toxic Effects of Chemical Substances)

#### Product Germ Cell Mutagenicity invivo Data

No data available.

#### Ingredient Germ Cell Mutagenicity 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
Methanol (<0.1%) CAS#: 67-56-1	DNA damage	Rat	0.405 mg/kg	None reported	Positive test result for mutagenicity	RTECS (Registry of Toxic Effects of Chemical Substances)
Sodium fluoride (<0.01%) CAS#: 7681-49-4	Cytogenetic analysis	Mouse	1 mg/L	3 weeks	Positive test result for mutagenicity	RTECS (Registry of Toxic Effects of Chemical Substances)

#### Inhalation (Vapor) Exposure Route

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

#### **Reproductive toxicity**

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

#### **Product Reproductive Toxicity Data**

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
Methanol (<0.1%) CAS#: 67-56-1	Rat TD⊾₀	4118 mg/kg	10 days	Effects on Embryo or Fetus Specific Developmental Abnormalities Ear Eye Fetotoxicity (except death e.g. stunted fetus) Urogenital System	RTECS (Registry of Toxic Effects of Chemical Substances)
Sodium fluoride (<0.01%) CAS#: 7681-49-4	Rat TD∟₀	240 mg/kg	None reported	Specific Developmental Abnormalities Musculoskeletal system	RTECS (Registry of Toxic Effects of Chemical Substances)

#### Inhalation (Dust/Mist) Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Methanol	Rat	0.0026 mg/L	22 days	Effects on Embryo or Fetus	RTECS (Registry of Toxic
(<0.1%)	TCLO			Fetotoxicity (except death e.g.	Effects of Chemical
CAS#: 67-56-1				stunted fetus)	Substances)

#### Inhalation (Vapor) Exposure Route

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

#### 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

0.0001 % of the mixture consists of component(s) of unknown hazards to the aquatic environment.

#### Product Ecological Data

#### Aquatic Acute Toxicity No data available.

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#### Aquatic Chronic Toxicity No data available.

#### Ingredient Ecological Data

#### **Aquatic Acute Toxicity**

Test data reported below.

Fish

Chemical name	Exposure	Species	Endpoint	Reported	Key literature references and
	time		type	dose	sources for data
Formaldehyde	96 hours	Morone saxatilis	LC <sub>50</sub>	6.7 mg/L	PEEN (Pan European Ecological
(<0.1%)					Network)
CAS#: 50-00-0					
Sodium fluoride	96 hours	Channa punctatus	LC <sub>50</sub>	51 mg/L	GESTIS (Information System on
(<0.01%)					Hazardous Substances of the
CAS#: 7681-49-4					German Social Accident
					Insurance)

#### Crustacea

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Formaldehyde (<0.1%) CAS#: 50-00-0	48 Hours	Daphnia pulex	EC <sub>50</sub>	5.8 mg/L	PEEN (Pan European Ecological Network)
Sodium fluoride (<0.01%) CAS#: 7681-49-4	48 Hours	Daphnia magna	EC <sub>50</sub>	98 mg/L	GESTIS (Information System on Hazardous Substances of the German Social Accident Insurance)

#### Aquatic Chronic Toxicity No data available.

#### Persistence and degradability

#### Product Biodegradability Data No data available.

#### **Product Bioaccumulation Data** No data available.

Partition Coefficient (n-octanol/water)

Mobility

Soil Organic Carbon-Water Partition Coefficient

Not applicable

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.

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#### Contaminated packaging

Do not reuse empty containers.

US EPA Waste Number

#### U122 U154

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Formaldehyde 50-00-0	U122	Included in waste streams: K009, K010, K038, K040, K156, K157	-	U122
Methanol 67-56-1	-	Included in waste stream: F039	-	U154

#### Special instructions for disposal

If permitted by regulation. Open cold water tap completely, slowly pour the material to the drain. Allow cold water to run for 5 minutes to completely flush the system. Dispose of material in an E.P.A. approved hazardous waste facility.

	14. TRANSPORT INFORMATION	
DOT	Not regulated	
TDG	Not regulated	
IATA_	Not regulated	
IMDG	Not regulated	
Note:	No special precautions necessary.	

#### Additional information

There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is not in a reagent set or kit, the classification given above applies.

If the item is part of a reagent set or kit the classification would change to the following:

UN3316 Chemical Kit, Hazard Class 9, Packing Group II or III.

If the item is not regulated, the Chemical Kit classification does not apply.

# **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

Complies
Complies

**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
Methanol (CAS #: 67-56-1)	1.0
SARA 311/312 Hazard Categories	
Acute health hazard	No
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
Sodium fluoride 7681-49-4	1000 lb	-	-	Х

#### **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
Methanol	5000 lb	-	RQ 5000 lb final RQ
67-56-1			RQ 2270 kg final RQ
Sodium fluoride	1000 lb	-	RQ 1000 lb final RQ
7681-49-4			RQ 454 kg final RQ
ILC Dementionent of Hermole	ad Coounity Chambool Feellity A	nti Tannaniana Ctanalanda (CEAT	

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%) CAS#: 50-00-0	Release - Toxic (solution)	

#### 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, Methanol, which are known to the State of California to cause cancer or birth defects or reproductive harm. For more information, go to <u>http://www.P65Warnings.ca.gov</u>

**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
Formaldehyde 50-00-0	Х	X	Х
Methanol 67-56-1	Х	Х	Х
Sodium fluoride 7681-49-4	Х	Х	Х

#### U.S. EPA Label Information

Chemical name	FIFRA	FDA
Methanol	180.0910	-
Sodium fluoride	180.0145	-

# 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
Formaldehyde	Declarable Substance (FI)	0 %
50-00-0	Prohibited Substance (FI)	0.1 %
	Declarable Substance (LR)	
	Prohibited Substance (LR)	
Methanol	Declarable Substance (FI)	0.6 %
67-56-1	Prohibited Substance (FI)	0.1 %
	Declarable Substance (LR)	
	Prohibited Substance (LR)	

#### **NFPA and HMIS Classifications**

NFPA	Health hazards - 0	Flammability - 0	Instability - 0	Physical and chemical properties -
HMIS	Health hazards - 0	Flammability - 0	Physical hazards - 0	Personal protection - X
				- 1

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

NIOSH IDLH ACGIH NDF		Immediately Dangerous to Life or Health ACGIH (American Conference of Governme no data		ental Industrial Hygienists)				
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* RSP+ C M	Skin designation Respiratory sensit Carcinogen mutagen	ization	SKN+ ** R	Skin sensitization Hazard Designation Reproductive toxicant				
Prepared By		Hach Product Compliance Department						
Issue Date 04-May-2021								
Revision Date		04-May-2021						
<b>Revision Note</b>		None						
Disclaimer								

**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