

SAFETY DATA SHEET

Issue Date 04-May-2021 Revision Date Version 4.7 Page 1 / 17

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1. IDENTIFICATION

Product identifier

Product Name Fluoride Standard Solution 2.0 mg/L as F

Other means of identification

Product Code(s) 40520

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

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3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance Not applicable

Mixture

Chemical Family Mixture.

Chemical nature aqueous solution.

Chemical name	CAS No	Percent Range	HMRIC #
Formaldehyde	50-00-0	<0.1%	-
Methanol	67-56-1	<0.1%	-
Sodium fluoride	7681-49-4	<0.01%	-

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

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

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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 Ensure adequate ventilation.

Environmental precautions

Environmental precautions See Section 12 for additional ecological information.

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.

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 ³	TWA: 200 ppm
	S*	(vacated) TWA: 200 ppm	TWA: 260 mg/m ³
		(vacated) TWA: 260 mg/m ³	STEL: 250 ppm
		(vacated) STEL: 250 ppm	STEL: 325 mg/m ³
		(vacated) STEL: 325 mg/m ³	_

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		(vacated) SKN*	
Sodium fluoride	TWA: 2.5 mg/m ³ F	TWA: 2.5 mg/m ³	IDLH: 250 mg/m ³ F
CAS#: 7681-49-4		(vacated) TWA: 2.5 mg/m ³	TWA: 2.5 mg/m ³ F

Appropriate engineering controls

Engineering Controls

Showers

Eyewash stations

Ventilation systems. Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Individual protection measures, such as personal protective equipment

Respiratory protection No protective equipment is

No protective equipment is needed under normal use conditions. If exposure limits are 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.

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 No special protective equipment required. Avoid contact with eyes, skin and clothing.

General Hygiene Considerations Handle in accordance with good 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.

Thermal hazards None under normal processing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state

Liquid

Appearance aqueous solution

Color colorless

Odor Odorless Odor threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

Molecular weight No data available

pH ~ 7 @ 20 °C

Melting point/freezing point ~ 0 °C / 32 °F

Boiling point / boiling range $\sim 100 \, ^{\circ}\text{C} \, / \, 212 \, ^{\circ}\text{F}$

Evaporation rate 0.76 (water = 1)

Vapor pressure 23.777 mm Hg $\,/\,$ 3.17 kPa at 25 °C $\,/\,$ 77 °F

Relative vapor density 0.62

Specific gravity (water = 1 / air = 1) 0.986

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Partition Coefficient (n-octanol/water) Not applicable

Soil Organic Carbon-Water Partition

Coefficient

Not applicable

Autoignition temperature No data available

Decomposition temperatureNo 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
ı	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

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

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

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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.

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%)	Rat	100 mg/kg	None	None reported	GESTIS (Information System on Hazardous Substances of
(<0.1%) CAS#: 50-00-0	LD ₅₀		reported		the German Social Accident

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					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 LD ₅₀	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 LD₅o	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 LC ₅₀	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
ATFmix (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

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

Respiratory Sensitization Exposure Route

ſ	Chemical name	Test method	Species	Results	Key literature references and
L					sources for data
Γ	Formaldehyde	IgE Specific	Guinea pig	Confirmed to be a respiratory	CICAD (Concise International
1	(<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	Human	70 mg/kg	None	Gastrointestinal	RTECS (Registry of Toxic
(<0.1%) CAS#: 50-00-0	LD∟₀		reported	Kidney, Ureter, or Bladder Liver	Effects of Chemical Substances)
				Other changes Ulcerated stomach Other changes	
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

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

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)

 $\begin{tabular}{ll} \hline \textbf{Carcinogenicity} \\ \hline \textbf{Based on available data, the classification criteria are not met.} \\ \hline \end{tabular}$

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	X
Methanol	67-56-1	-	-	-	-
Sodium fluoride	7681-49-4	-	Group 3	-	Χ

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

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Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and
	type	dose	time		sources for data
Sodium fluoride	Mouse	14 mg/kg	43 weeks	Skin and Appendages	RTECS (Registry of Toxic
(<0.01%)	TDLo			Tumors	Effects of Chemical
CAS#: 7681-49-4					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 lymphocyte	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	Test	Species	Reported	Exposure	Results	Key literature
			dose	time		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	Reported	Exposure	Toxicological effects	Key literature references and
	type	dose	time		sources for data
Methanol	Rat	0.0026 mg/L	22 days	Effects on Embryo or Fetus	RTECS (Registry of Toxic
(<0.1%)	TCL₀			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%)	TCL₀			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 time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Formaldehyde (<0.1%) CAS#: 50-00-0	96 hours	Morone saxatilis	LC50	6.7 mg/L	PEEN (Pan European Ecological Network)
Sodium fluoride (<0.01%) CAS#: 7681-49-4	96 hours	Channa punctatus	LC50	51 mg/L	GESTIS (Information System on Hazardous Substances of the 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	EC50	5.8 mg/L	PEEN (Pan European Ecological Network)
Sodium fluoride (<0.01%) CAS#: 7681-49-4	48 Hours	Daphnia magna	EC50	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)

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.

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Contaminated packaging Do not reuse empty containers.

US EPA Waste Number U122 U154

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

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

International Inventories

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

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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	-	-	X

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

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	Release - Toxic (solution)
(<0.1%)	
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

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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 http://www.P65Warnings.ca.gov

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	X	X	X
Methanol 67-56-1	X	X	Х
Sodium fluoride 7681-49-4	X	X	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
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Key or legend to abbreviations and acronyms used in the safety data sheet

NIOSH IDLH Immediately Dangerous to Life or Health

ACGIH (American Conference of Governmental Industrial Hygienists)

NDF no data

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 04-May-2021

Revision Date 10-Aug-2021

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@2021

End of Safety Data Sheet

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