

SAFETY DATA SHEET

Issue Date 16-Aug-2018 Revision Date 16-Aug-2018 Version 3.2 Page 1 / 16

1. IDENTIFICATION

Product identifier

Product Name Phosphate Standard Solution 50.0 mg/L as PO₄

Other means of identification

Product Code(s) 17149

Safety data sheet number M00224

Recommended use of the chemical and restrictions on use

Recommended Use Standard solution.

Uses advised against None. Restrictions on use None.

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 +1(515)232-2533 - 8am - 4pm CST

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

Hazard statements

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

Other Hazards Known

Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

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Substance Not applicable

Mixture

Chemical name	CAS No.	Percent Range	HMRIC #
Methyl alcohol	67-56-1	<0.1%	-
Formaldehyde	50-00-0	<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

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 This material will not burn.

Special protective equipment for

fire-fighters

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

gear.

6. ACCIDENTAL RELEASE MEASURES

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

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

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

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

should respond to a spill involving chemicals.

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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 Pick up and transfer to properly labeled containers.

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 IDLH
Methyl alcohol	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	-
		(vacated) SKN*	
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	

Appropriate engineering controls

Engineering Controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

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

Hand Protection Wear suitable gloves.

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

Skin and body protectionNo special protective equipment required.

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 aq

aqueous solution

clear

Color colorless

Odor Odorless

Odor threshold No data available

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

Molecular weight No data available

pH 5

Melting point/freezing point = 0 °C / 32 °F Estimation based on theoretical

calculation

Boiling point / boiling range = 100 °C / 212 °F Estimation based on theoretical

calculation

Evaporation rate 0.99 (water = 1)

Vapor pressure 23.027 mm Hg / 3.07 kPa at 25 °C / 77 °F Estimation based on theoretical

calculation

Vapor density (air = 1) 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 data available

Dynamic viscosity 1 mPa s at 20 °C / 68 °F

Kinematic viscosity

No data available at 20 °C / 68 °F

Solubility(ies)

Water solubility

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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
Acid	Soluble	> 1000 mg/L	25 °C / 77 °F
Ethyl alcohol	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)
Methyl alcohol	67-56-1	No data available	X
Formaldehyde	50-00-0	No data available	X

Explosive properties

Upper explosion limitNo data availableLower explosion limitNo data available

Flammable properties

Flash point No data available

Flammability Limit in Air

Upper flammability limitNo data availableLower flammability limitNo data available

Oxidizing properties No data available.

Bulk density No data available

Particle Size No information available

Particle Size Distribution No information available

10. STABILITY AND REACTIVITY

Reactivity

Not applicable.

Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to Mechanical Impact None Sensitivity to Static Discharge None.

Possibility of Hazardous Reactions

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Possibility of Hazardous Reactions None under normal processing.

Hazardous polymerization

None under normal processing.

Conditions to avoid

Conditions to avoidNone known based on information supplied.

Incompatible materials

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.

Aggravated Medical Conditions None known.

Toxicologically synergistic None known.

products

Toxicokinetics, metabolism and See ingredients information below.

distribution

	Chemical name	Toxicokinetics, metabolism and distribution
	,	Metabolism of methanol appears to be similar regardless of administrative route. Methanol is converted to
	,	formaldehyde, which is converted to formate which is oxidized to carbon dioxide in primates.
ļ	CAS#: 67-56-1	
		Readily Absorbed via the respiratory and gastrointestinal routes. Absorbed formaldehyde can be oxidized to
	(<0.1%)	formate and carbon dioxide. Half-life of formaldehyde is 1 min in rat plasma.
	CAS#: 50-00-0	

Product Acute Toxicity Data

Oral Exposure RouteNo data availableDermal Exposure RouteNo data availableInhalation (Dust/Mist) Exposure RouteNo data availableInhalation (Vapor) Exposure RouteNo data availableInhalation (Gas) Exposure RouteNo data available

Unknown Acute Toxicity

0% 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

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ATEmix (inhalation-vapor)	No information available
ATEmix (inhalation-gas)	No information available

Ingredient Acute Toxicity Data

Oral Exposure Route If available, see data below

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Formaldehyde (<0.1%) CAS#: 50-00-0	Rat LD ₅₀	100 mg/kg	None reported	None reported	GESTIS (Information System on Hazardous Substances of the German Social Accident Insurance)

Dermal Exposure Route If available, see data below

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)

Inhalation (Dust/Mist) Exposure Route If available, see data below

	Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and
L		type	dose	time		sources for data
	Formaldehyde (<0.1%) CAS#: 50-00-0	Rat LC₅₀	0.578 mg/L	4 hours	None reported	LOLI

Inhalation (Vapor) Exposure Route
Inhalation (Gas) Exposure Route

If available, see data below If available, see data below

Product Specific Target Organ Toxicity Single Exposure Data

Oral Exposure RouteNo data availableDermal Exposure RouteNo data availableInhalation (Dust/Mist) Exposure RouteNo data availableInhalation (Vapor) Exposure RouteNo data availableInhalation (Gas) Exposure RouteNo data available

Ingredient Specific Target Organ Toxicity Single Exposure Data

Oral Exposure Route If available, see data below

ai Exposure Route				ii available, see data below			
Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data		
Methyl alcohol	Human	143 mg/kg	None	Lungs, Thorax, or	RTECS (Registry of Toxic		
(<0.1%)	LD∟o		reported	Respiration	Effects of Chemical		
CAS#: 67-56-1			•	Dyspnea	Substances)		
Formaldehyde	Human	70 mg/kg	None	Gastrointestinal	RTECS (Registry of Toxic		
(<0.1%)	LDLo		reported	Kidney, Ureter, or Bladder	Effects of Chemical		
CAS#: 50-00-0			·	Liver	Substances)		
				Other changes	·		
				Ulcerated stomach			
				Other changes			
Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and		
	type	dose	time	-	sources for data		
Methyl alcohol	Man	3.571 mg/kg	None	Lungs, Thorax, or	RTECS (Registry of Toxic		
(<0.1%)	LDLo		reported	Respiration	Effects of Chemical		
CAS#: 67-56-1				Dyspnea	Substances)		
Formaldehyde	Human	643 mg/kg	None	Gastrointestinal	RTECS (Registry of Toxic		
(<0.1%)	TDLo		reported	Lungs, Thorax, or	Effects of Chemical		
CAS#: 50-00-0				Respiration	Substances)		
				Nausea or vomiting			
				Respiratory obstruction			
				Ulcerated stomach			

Dermal Exposure Route Inhalation (Dust/Mist) Exposure Route If available, see data below
If available, see data below

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Inhalation (Vapor) Exposure Route

If available, see data below

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Methyl alcohol	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)

Inhalation (Gas) Exposure Route

If available, see data below

Aspiration toxicity

If available, see data below

Product Skin Corrosion/Irritation Data

No data available.

Ingredient Skin Corrosion/Irritation Data

If available, see data below

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Methyl alcohol (<0.1%) CAS#: 67-56-1	Standard Draize Test	Rabbit	20 mg	24 hours	Skin irritant	RTECS (Registry of Toxic Effects of Chemical Substances)
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)

Product Serious Eye Damage/Eye Irritation Data

No data available.

Ingredient Eye Damage/Eye Irritation Data

If available, see data below

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Methyl alcohol (<0.1%) CAS#: 67-56-1	Standard Draize Test	Rabbit	40 mg	None reported	Eye irritant	RTECS (Registry of Toxic Effects of Chemical Substances)
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)

Sensitization Information

Product Sensitization Data

Skin Sensitization Exposure Route Respiratory Sensitization Exposure Route No data available. No data available.

Ingredient Sensitization Data

Skin Sensitization Exposure Route

If available, see data below.

Olilli GolloitiEation Ex	podalo itoato			·
Chemical name Test method		Species	Results	Key literature references and
				sources for data
Formaldehyde	Patch test	Human	Confirmed to be a skin sensitizer	ERMA (New Zealands Environmental
(<0.1%)				Risk Management Authority)
CAS#: 50-00-0				

Respiratory Sensitization Exposure Route If available, see data below.

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			•

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Chronic Toxicity Information

Product Specific Target Organ Toxicity Repeat Dose Data

Oral Exposure Route

Dermal Exposure Route

Inhalation (Dust/Mist) Exposure Route

Inhalation (Vapor) Exposure Route

Inhalation (Gas) Exposure Route

No data available.

No data available.

No data available.

No data available.

Ingredient Specific Target Organ Toxicity Repeat Exposure Data

Oral Exposure Route

Dermal Exposure Route

If available, see data below
If available, see data below
Inhalation (Dust/Mist) Exposure Route
If available, see data below
Inhalation (Vapor) Exposure Route
If available, see data below
If available, see data below

illialation (vapor)	kposure Route	7		ii avallable, see data below				
Chemical name	Endpoint	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data			
	type							
Formaldehyde	Human	0.017 mg/L	0.5 days	Eye	RTECS (Registry of Toxic			
(<0.1%)	TCLo			Lungs, Thorax, or	Effects of Chemical			
CAS#: 50-00-0				Respiration	Substances)			
				Lacrimation	,			
				Other changes				
Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and			
	type	dose	time	_	sources for data			
Formaldehyde	Human	2 mg/L	40 minutes	Lungs, Thorax, or	RTECS (Registry of Toxic			
(<0.1%)	TCLo			Respiration	Effects of Chemical			
CAS#: 50-00-0				Other changes	Substances)			
				Respiratory depression	,			

Inhalation (Gas) Exposure Route

If available, see data below

Product Carcinogenicity Data

Oral Exposure RouteNo data availableDermal Exposure RouteNo data availableInhalation (Dust/Mist) Exposure RouteNo data availableInhalation (Vapor) Exposure RouteNo data availableInhalation (Gas) Exposure RouteNo data available

Ingredient Carcinogenicity Data

Ī	Chemical name	CAS No.	ACGIH	IARC	NTP	OSHA
Γ	Methyl alcohol	67-56-1	-	-	=	-
Γ	Formaldehyde	50-00-0	A1	Group 1	Known	Χ

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)	Does not apply
IARC (International Agency for Research on Cancer)	Does not apply
NTP (National Toxicology Program)	Does not apply
OSHA (Occupational Safety and Health Administration of the US Department of	Does not apply
Labor)	·

Oral Exposure Route

Dermal Exposure Route

If available, see data below

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

Inhalation (Gas) Exposure Route

If available, see data below

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<u>Product Germ Cell Mutagenicity invitro Data</u>

No data available.

Ingredient Germ Cell Mutagenicity invitro Data

If available, see data below

Chemical name	Test	Cell Strain	Reported dose	Exposure time	Results	Key literature references and sources for data
Methyl alcohol (<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)

Product Germ Cell Mutagenicity invivo Data

Oral Exposure Route
Dermal Exposure Route
Inhalation (Dust/Mist) Exposure Route
Inhalation (Vapor) Exposure Route
Inhalation (Gas) Exposure Route

No data available No data available No data available No data available No data available

Ingredient Germ Cell Mutagenicity invivo Data

Oral Exposure Route If available, see data below

Chemical name	Test	Species	Reported	Exposure	Results	Key literature
			dose	time		references and
						sources for data
Methyl alcohol	DNA damage	Rat	0.405 mg/kg	None	Positive test result for	RTECS (Registry
(<0.1%)				reported	mutagenicity	of Toxic Effects of
CAS#: 67-56-1						Chemical
						Substances)
Chemical name	Test	Species	Reported	Exposure	Results	Key literature
			dose	time		references and
						sources for data
Methyl alcohol	Cytogenetic	Mouse	1000 mg/kg	None	Positive test result for	RTECS (Registry
(<0.1%)	analysis			reported	mutagenicity	of Toxic Effects of
CAS#: 67-56-1	·					Chemical
						Substances)

Dermal Exposure Route Inhalation (Dust/Mist) Exposure Route Inhalation (Vapor) Exposure Route If available, see data below If available, see data below If available, see data below

				,				
Chemical name	Test	Species	Reported	Exposure	Results	Key literature		
			dose	time		references and		
						sources for data		
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)		
Chemical name	Test	Species	Reported	Exposure	Results	Key literature		
			dose	time		references and		
						sources for data		
Formaldehyde	Micronucleus test	Human	2 mg/L	15 minutes	Positive test result for	RTECS (Registry		
(<0.1%)					mutagenicity	of Toxic Effects of		
CAS#: 50-00-0						Chemical		
						Substances)		
halatian (Oas) European Banta								

Inhalation (Gas) Exposure Route

If available, see data below

Product Reproductive Toxicity Data

Oral Exposure RouteNo data availableDermal Exposure RouteNo data availableInhalation (Dust/Mist) Exposure RouteNo data available

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Inhalation (Vapor) Exposure Route Inhalation (Gas) Exposure Route

No data available No data available

Ingredient Reproductive Toxicity Data

Oral Exposure Route If available, see data below

Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and
	type	dose	time		sources for data
Methyl alcohol	Rat	4118 mg/kg	10 days	Effects on Embryo or Fetus	RTECS (Registry of Toxic
(<0.1%)	TDLo			Specific Developmental	Effects of Chemical
CAS#: 67-56-1				Abnormalities	Substances)
				Ear	
				Eye	
				Fetotoxicity (except death e.g.	
				stunted fetus)	
				Urogenital System	

Dermal Exposure Route If available, see data below Inhalation (Dust/Mist) Exposure Route If available, see data below

Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and
	type	dose	time		sources for data
Methyl alcohol	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 If available, see data below

	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 TC∟₀	40 mg/L	14 days	Effects on Embryo or Fetus Fetotoxicity (except death e.g. stunted fetus)	RTECS (Registry of Toxic Effects of Chemical Substances)
-	Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
	Methyl alcohol (<0.1%) CAS#: 67-56-1	Mouse TC _{Lo}	1500 mg/L	7-9 days	Specific Developmental Abnormalities Central Nervous System	RTECS (Registry of Toxic Effects of Chemical Substances)
	Formaldehyde (<0.1%) CAS#: 50-00-0	Rat TC∟₀	.001 mg/L	24 weeks	Effects on Embryo or Fetus Cytological changes (including somatic cell genetic material)	RTECS (Registry of Toxic Effects of Chemical Substances)

Inhalation (Gas) Exposure Route

If available, see data below

12. ECOLOGICAL INFORMATION

Ecotoxicity

Product Ecological Data

Aquatic toxicity

No data available **Fish** Crustacea No data available No data available Algae

Ingredient Ecological Data

Aquatic toxicity

Fish			If a\	If available, see ingredient data below					
	Chemical name	Fynosure	Species	Endnoint	Reported	Key li			

			~	, aa,	rigioanorii aata i	
	Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
	Formaldehyde (<0.1%)	96 hours	Morone saxatilis	LC50	6.7 mg/L	PEEN (Pan European Ecological Network)
١	CAS#: 50-00-0					

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Crustacea If available, see ingredient data below

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)

Algae No data available

Other Information

Persistence and degradability

Product Biodegradability Data

No data available.

Ingredient Biodegradability Data

Bioaccumulation

Product Bioaccumulation Data

No data available.

Partition Coefficient (n-octanol/water)

Not applicable

Ingredient Bioaccumulation Data

Chemical name	Test method	Exposure time	Species	Bioconcentrat ion factor (BCF)	Results
Methyl alcohol (<0.1%) CAS#: 67-56-1	OECD Test 305: Bioaccumulation in Fish	None reported	None reported	BCF < 10	Does not have the potential to bioaccumula te
Formaldehyde (<0.1%) CAS#: 50-00-0	Estimation through BCFBAF v3.01 part of the Estimation Programs Interface (EPI) Suite™	None reported	None reported	BCF = 3.16228	Does not have the potential to bioaccumula te

Mobility

Soil Organic Carbon-Water Partition Coefficient

Not applicable

Water solubility

Water solubility classification	<u>Water solubility</u>	Water Solubility Temperature
Soluble	> 1000 mg/L	25 °C / 77 °F

Other adverse effects

Contains a substance with an endocrine-disrupting potential.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

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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 U154 U122

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

Special instructions for disposal

Adjust to a pH between 6 and 9 with an alkali, such as soda ash or sodium bicarbonate. If permitted by regulation. Open cold water tap completely, slowly pour the reacted material to the drain. Allow cold water to run for 5 minutes to completely flush the system. Check with national, local municipal and state authorities and waste contractors for pertinent local information on the disposal of this article.

14. TRANSPORT INFORMATION

U.S. DOT Not regulated

TDG Not regulated

<u>IATA</u> Not regulated

<u>IMDG</u> 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 PICCS** Complies **TCSI** Complies **AICS** Complies Complies **NZIoC**

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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 %
Methyl alcohol (CAS #: 67-56-1)	1.0
Formaldehyde (CAS #: 50-00-0)	0.1

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

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)
Methyl alcohol	5000 lb	-	RQ 5000 lb final RQ
67-56-1			RQ 2270 kg final RQ
Formaldehyde	100 lb	100 lb	RQ 100 lb final RQ
50-00-0			RQ 45.4 kg final RQ

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

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

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

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Chemical name	California Proposition 65	
Methyl alcohol (CAS #: 67-56-1)	Developmental	
Formaldehyde (CAS #: 50-00-0)	Carcinogen	

WARNING: This product can expose you to chemicals including Formaldehyde, Methyl alcohol, 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

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Methyl alcohol 67-56-1	Х	X	X
Formaldehyde 50-00-0	X	X	X

U.S. EPA Label Information

Chemical name	FIFRA	FDA
Methyl alcohol	180.0910	-

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
Methyl alcohol 67-56-1	Declarable Substance (FI)	0.1 %
Formaldehyde 50-00-0	Declarable Substance (FI) Prohibited Substance (LR) Declarable Substance (LR)	0.0 % 0.1 %

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
				- See section 8 for more
				information

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

NIOSH IDLH Immediately Dangerous to Life or Health

ACGIH ACGIH (American Conference of Governmental Industrial Hygienists)

NDF no data

<u>Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION</u>

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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 16-Aug-2018

Revision Date 16-Aug-2018

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.

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End of Safety Data Sheet

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