

SAFETY DATA SHEET

Issue Date 16-Aug-2018

Revision Date 10-Aug-2021 Version 1.5

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1. IDENTIFICATION

Product identifier Product Name	Chlorine Dioxide Reagent 2	
Other means of identification Product Code(s)	2070142	
Safety data sheet number	M00367	
Deservation de deservations of the schemeles		

Recommended use of the chemical and restrictions on use			
Recommended Use	Determination of chlorine dioxide.		
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

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

EN / AGHS

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable

<u>Mixture</u>

Chemical name	CAS No	Percent	HMRIC #
		Range	
Phenol, 2,4,6-trinitro-	88-89-1	<0.1%	-
Formaldehyde	50-00-0	<0.1%	-
Sodium hydroxide	1310-73-2	<0.1%	-
Methanol	67-56-1	<0.1%	-
Poly(oxy-1,2-ethanediyl),	9002-93-1	<0.1%	-
.alpha[4-(1,1,3,3-tetramethylbutyl)phenyl]omegahydroxy-			

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 No information available. chemical	
Hazardous combustion products	This material will not burn.
Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

U.S. 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 ed	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	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
Phenol, 2,4,6-trinitro-	TWA: 0.1 mg/m ³	TWA: 0.1 mg/m ³	IDLH: 75 mg/m ³
CAS#: 88-89-1		(vacated) TWA: 0.1 mg/m ³	TWA: 0.1 mg/m ³
		(vacated) SKN*	STEL: 0.3 mg/m ³
		*	
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	
Sodium hydroxide	Ceiling: 2 mg/m ³	TWA: 2 mg/m ³	IDLH: 10 mg/m ³
CAS#: 1310-73-2		(vacated) Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³
Methanol	STEL: 250 ppm	TWA: 200 ppm	IDLH: 6000 ppm

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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*		
Appropriate orginacting controls		(vacaled) SKN		
Appropriate engineering controls Engineering Controls	Showers			
Engineering Controls	Eyewash stations			
	Ventilation systems.			
	ventilation systems.			
Individual protection measures, su	ch as personal protective equ	ipment		
Respiratory protection		eded under normal use conditio	ns. If exposure limits are	
	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).		
	No apopial protective equipment required			
Skin and body protection	No special protective equipment required.			
	nsiderations Handle in accordance with good industrial hygions and safety practice			
General Hygiene Considerations	iderations Handle in accordance with good industrial hygiene and safety practice.			
Environmental exposure controls	Is 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.			
	anow into any sewer, on the ground of 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 Appearance Odor	aqueous solution Mild hydrocarbon	Liquid		Color Odor threshold	dark violet No data availa	able	
Property_			Values		Ī	Remarks	Method
Molecular weight	t		No data availat	ble			
рН			9.0				
Melting point/free	ezing point		~ 0 °C / 32	°F			
Boiling point / bo	ag point / boiling range ~ 100 °C / 212 °F						
Evaporation rate		0.62 (water = 1)					
Vapor pressure			17.477 mm Hg / 2.33 kPa at 20 °C / 68 °F				
Relative vapor de	ensity		0.62				
Specific gravity (water = 1 / air = 1)		0.99				
Partition Coeffici	ent (n-octanol/wate	r)	Not applicable				
Soil Organic Car Coefficient	bon-Water Partition		Not applicable				
Autoignition tem	perature		No data availat	ble			
Decomposition t	emperature		No data availat	ble			

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Dynamic viscosity	~ 1 cP (mPa s) at 20 °C / 68 °F

Kinematic viscosity ~ 1.01 cSt (mm²/s) at 20 °C / 68 °F

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	
Most Polar Organic Solvents	Soluble	> 1000 mg/L	25 °C / 77 °F	

Other information

Metal Corrosivity

Steel Corrosion Rate Aluminum Corrosion Rate

Volatile Organic Compounds (VOC) Content See ingredients information below

No data available No data available

Chemical name	CAS No	Volatile organic compounds (VOC) content	CAA (Clean Air Act)
Phenol, 2,4,6-trinitro-	88-89-1	No data available	-
Formaldehyde	50-00-0	No data available	Х
Sodium hydroxide	1310-73-2	No data available	-
Methanol	67-56-1	100%	Х
Poly(oxy-1,2-ethanediyl),	9002-93-1	No data available	-
.alpha[4-(1,1,3,3-tetramethylbutyl)ph			
enyl]omegahydroxy-			

Explosive properties

Upper explosion limit Lower explosion limit	No data available No data available
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	No data available

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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

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%)	None reported	None reported	None reported	None reported	No information available

CAS#: 67-56-1					
Poly(oxy-1,2-ethaned iyl), .alpha[4-(1,1,3,3-tetr amethylbutyl)phenyl]- .omegahydroxy- (<0.1%) CAS#: 9002-93-1	Rat LD₅₀	1800 mg/kg	None reported	None reported	ERMA (New Zealands Environmental Risk Management Authority)
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
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
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

0.001% 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.

Ingredient Skin Corrosion/Irritation Data

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Formaldehyde (<0.1%)	Standard Draize Test	Human	0.150 mg	72 hours	Corrosive to skin	RTECS (Registry of Toxic Effects of
CAS#: 50-00-0						Chemical Substances)
Sodium hydroxide	Patch test	Human	20 mg	24 hours	Corrosive to skin	RTECS (Registry of
(<0.1%)						Toxic Effects of

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CAS#: 1310-73-2					Chemical Substances)
(<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

No data available.

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)
Sodium hydroxide (<0.1%) CAS#: 1310-73-2	Standard Draize Test	Rabbit	0.05 mg	24 hours	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	Rabbit	0.05 mL	24 hours	Not corrosive or irritating to eyes	ECHA (The European Chemicals Agency)
Poly(oxy-1,2-ethaned iyl), .alpha[4-(1,1,3,3-tetr amethylbutyl)phenyl]- .omegahydroxy- (<0.1%) CAS#: 9002-93-1	Test	Rabbit	None reported	None reported	Corrosive to eyes	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

No data available.

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

STOT - single exposure

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

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

Ingredient Specific Target Organ Toxicity Single Exposure Data No data available.

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%)	LDLo		reported	Kidney, Ureter, or Bladder	Effects of Chemical
CAS#: 50-00-0				Liver	Substances)
				Other changes	
				Ulcerated stomach	
				Other changes	
Methanol	Human	143 mg/kg	None	Lungs, Thorax, or	RTECS (Registry of Toxic
(<0.1%)	LDLo		reported	Respiration	Effects of Chemical
CAS#: 67-56-1			-	Dyspnea	Substances)
Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and
	type	dose	time	-	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 No data available.

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Methanol (<0.1%) CAS#: 67-56-1	Monkey	2340 mg/kg	3 days	None reported	ECHA (The European Chemicals Agency)
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)

Carcinogenicity

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

Product Carcinogenicity Data

No data available.

Ingredient Carcinogenicity Data

Chemical name	CAS No	ACGIH	IARC	NTP	OSHA
Phenol, 2,4,6-trinitro-	88-89-1	-	-	-	-
Formaldehyde	50-00-0	A1	Group 1	Known	Х
Sodium hydroxide	1310-73-2	-	-	-	-
Methanol	67-56-1	-	-	-	-
Poly(oxy-1,2-ethanediyl),	9002-93-1	-	-	-	-
.alpha[4-(1,1,3,3-tetramet					

hylbutyl)phenyl]omegah			
ydroxy-			

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)	

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	15 mg/L	78 weeks	Olfaction Tumors	RTECS (Registry of Toxic Effects of Chemical 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

No data available.

Chemical name	Test	Cell Strain	Reported dose	Exposure time	Results	Key literature references and sources for data
Methanol (<0.1%)	DNA inhibition	Human lymphocyte	300 mmol/L	None reported	Positive test result for mutagenicity	RTECS (Registry of Toxic Effects of
CAS#: 67-56-1						Chemical Substances)

Product Germ Cell Mutagenicity invivo Data

No data available.

Ingredient Germ Cell Mutagenicity invivo Data

No data available.

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

Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and
	type	dose	time		sources for data
Methanol	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	
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%)	TCLo	_		Fetotoxicity (except death e.g.	Effects of Chemical
CAS#: 67-56-1				stunted fetus)	Substances)
Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and
	type	dose	time		sources for data
Formaldehyde	Rat	40 mg/L	14 days	Effects on Embryo or Fetus	RTECS (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

Unknown aquatic toxicity

 $0.001\ \%$ of the mixture consists of component(s) of unknown hazards to the aquatic environment.

Product Ecological Data

Aquatic Acute Toxicity No data available.

Aquatic Chronic Toxicity No data available.

Ingredient Ecological Data

Aquatic Acute Toxicity

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Phenol, 2,4,6-trinitro- (<0.1%) CAS#: 88-89-1	96 hours	Oncorhynchus mykiss	LC ₅₀	109.6 mg/L	GESTIS (Information System on Hazardous Substances of the German Social Accident Insurance)
Formaldehyde (<0.1%) CAS#: 50-00-0	96 hours	Morone saxatilis	LC ₅₀	6.7 mg/L	PEEN (Pan European Ecological Network)
Sodium hydroxide (<0.1%) CAS#: 1310-73-2	96 hours	Oncorhynchus mykiss	LC ₅₀	45.4 mg/L	IUCLID (The International Uniform Chemical Information Database)
Poly(oxy-1,2-ethaned iyl), .alpha[4-(1,1,3,3-tetr	96 hours	Pimephales promelas	LC ₅₀	4.5 mg/L	ERMA (New Zealands Environmental Risk Management Authority)

amethylbutyl)phenyl]-					
.omegahydroxy-					
(<0.1%)					
CAS#: 9002-93-1	-	0	_		
Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Formaldehyde	48 Hours	Daphnia pulex	EC ₅₀	5.8 mg/L	PEEN (Pan European Ecological
(<0.1%)					Network)
CAS#: 50-00-0					
Sodium hydroxide	48 Hours	Daphnia sp.	EC ₅₀	40.4 mg/L	IUCLID (The International Uniform Chemical Information
(<0.1%) CAS#: 1310-73-2					Database)
Poly(oxy-1,2-ethaned	48 Hours	Daphina magna	LC ₅₀	18 mg/L	Vendor SDS
iyl),	40110015	Daprina magna	LC 50	10 mg/L	vendor 3D3
.alpha[4-(1,1,3,3-tetr					
amethylbutyl)phenyl]-					
.omegahydroxy-					
(<0.1%)					
CAS#: 9002-93-1					
Chemical name	Exposure	Species	Endpoint	Reported	Key literature references and
Dahu(aunu 4.0. ath ann ad	time	Niewe were entered	type	dose	sources for data
Poly(oxy-1,2-ethaned iyl),	96 hours	None reported	EC50	0.21 mg/L	ERMA (New Zealands Environmental Risk Management
.alpha[4-(1,1,3,3-tetr					Authority)
amethylbutyl)phenyl]-					, (dillonity)
.omegahydroxy-					
(<0.1%)					
CAS#: 9002-93-1					
Aquatia Chronia Tax					

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	inform	ation	available
UNU		auon	avaliable

Chemical name	EU - Endocrine Disrupters	EU - Endocrine Disrupters -	Endocrine disrupting
	Candidate List	Evaluated Substances	potential
Poly(oxy-1,2-ethanediyl), .alpha[4-(1,1,3,3-tetramethylbutyl)ph enyl]omegahydroxy- (<0.1%) CAS#: 9002-93-1	Group III Chemical	-	-

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

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. Check with local municipal and state authorities and waste contractors for pertinent local information regarding the proper disposal of chemicals.

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
Does not comply
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 %
Phenol, 2,4,6-trinitro- (CAS #: 88-89-1)	1.0
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

No

CWA (Clean Water Act)

Reactive Hazard

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 hydroxide 1310-73-2	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
Sodium hydroxide	1000 lb	-	RQ 1000 lb final RQ
1310-73-2			RQ 454 kg final RQ
Methanol	5000 lb	-	RQ 5000 lb final RQ
67-56-1			RQ 2270 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	
Phenol, 2,4,6-trinitro-	Release - Explosive (listed under Trinitrophenol); Theft -	
(<0.1%)	Explosives/Improvised Explosive Device Precursors (listed under	
CAS#: 88-89-1	Trinitrophenol)	
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
Methanol (CAS #: 67-56-1)	Developmental

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

This product does not contain any substances regulated by state right-to-know regulations.

Chemical name	New Jersey	Massachusetts	Pennsylvania
Phenol, 2,4,6-trinitro- 88-89-1	Х	X	Х
Formaldehyde 50-00-0	Х	X	Х
Sodium hydroxide 1310-73-2	Х	X	Х
Methanol 67-56-1	Х	X	Х

U.S. EPA Label Information

Chemical name	FIFRA	FDA
Sodium hydroxide	180.0910	21 CFR 184.1763
Methanol	180.0910	-
Poly(oxy-1,2-ethanediyl),	180.0910	-
.alpha[4-(1,1,3,3-tetramethylbutyl)phenyl]ome		
gahydroxy-		

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

Special Comments None

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)	
Poly(oxy-1,2-ethanediyl),	Declarable Substance (LR)	0.1 %
.alpha[4-(1,1,3,3-tetramethylbutyl)phenyl]ome		
gahydroxy-		
9002-93-1		

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 - I

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 Governmental Industrial Hygienists) 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			
Х	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 sensitization Carcinogen mutagen		SKN+ ** R	Skin sensitization Hazard Designation Reproductive toxicant			
Prepared By		Hach Product Compliance Department					
Issue Date		16-Aug-2018					
Revision Date		10-Aug-2021					
Revision Note		None					
Dicoloimor							

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