

General Advice	Do not get in eyes, on skin, or on clothing. Show this safety data sheet to the doctor in attendance.
Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin Contact	Wash off immediately with soap and plenty of water for at least 15 minutes while removing all contaminated clothing and shoes. Consult a physician if necessary.
Inhalation	Move to fresh air. If symptoms persist, call a physician.
Ingestion	Drink plenty of water. Consult a physician if necessary.
Protection of First-aiders	Use personal protective equipment.

5. FIRE-FIGHTING MEASURES

Flammable Properties	Not a fire hazard.
Suitable Extinguishing Media	Water spray, dry chemical, carbon dioxide (CO ₂), or foam.

NFPA	Health Hazard 1	Flammability 0	Stability 0	Physical and Chemical Hazards -
HMIS	Health Hazard 1	Flammability 0	Stability 0	

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Refer to Section 8. Ensure adequate ventilation. Use personal protective equipment.
Methods for Containment	Soak up with inert absorbent material, containerize, and hold for disposal.
Methods for Cleaning Up	If local regulations permit, rinse to drain with excess water. After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

Handling	Handle in accordance with good industrial hygiene and safety practice. Prevent contact with skin, eyes, and clothing. Do not ingest. Do not eat, drink, or smoke when using this product.
Storage	Keep containers tightly closed in a dry, cool, and well-ventilated place. Keep out of the reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Titriplex IV 87095-89-4	None Known	None Known	None Known
Methyl alcohol 67-56-1	250	TWA: 200 ppm TWA: 260 mg/m ³	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m ³ STEL: 250 ppm STEL: 325 mg/m ³
Formaldehyde 50-00-0	None Known	TWA: 0.75 ppm	IDLH: 20 ppm Ceiling: 0.1 ppm TWA: 0.016 ppm
Potassium biphthalate 877-24-7	None Known	None Known	None Known

Water 7732-18-5	None Known	None Known	None Known
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NIOSH IDLH: Immediately Dangerous to Life or Health

Engineering Measures Showers
 Eyewash stations
 Ventilation systems.

Personal Protective Equipment

Eye/Face Protection Safety glasses with side-shields.
Skin and Body Protection Wear protective gloves/clothing.
Respiratory Protection Maintain adequate ventilation.

Hygiene Measures Do not eat, drink or smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear Light yellow	Odor	None
Physical State	Liquid	pH	~ 4
Autoignition Temperature	Not applicable	Boiling Point/Range	Similar to water

Water Solubility	Completely soluble	Vapor Pressure	Essentially the same as water
Vapor Density	Essentially the same as water		

10. STABILITY AND REACTIVITY

Stability Stable under normal conditions of use and storage.

Incompatible Products No materials to be especially mentioned.

Hazardous Decomposition Products None under normal use.

Hazardous Polymerization Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Titriplex IV	None Known	None Known	None Known
Methyl alcohol	5628 mg/kg (Rat)	15800 mg/kg (Rabbit)	64000 ppm (Rat) 4 h 83.2 mg/L (Rat) 4 h
Formaldehyde	100 mg/kg (Rat)	270 mg/kg (Rabbit)	0.578 mg/L (Rat) 4 h 250 ppm (Rat) 4 h
Potassium biphthalate	3200 mg/kg (Rat)	None Known	None Known
Water	90 mL/kg (Rat)	None Known	None Known

Chronic Toxicity

Chemical Name	ACGIH	IARC	NTP	OSHA
Titriplex IV	None Known	None Known	None Known	None Known
Methyl alcohol	None Known	None Known	None Known	None Known
Formaldehyde	A2	Group 1	Reasonably Anticipated	X
Potassium biphthalate	None Known	None Known	None Known	None Known
Water	None Known	None Known	None Known	None Known

Chemical Name	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information
Titriplex IV	None Known	None Known	None Known
Methyl alcohol	None Known	None Known	None Known
Formaldehyde	None Known	None Known	None Known
Potassium biphthalate	None Known	None Known	None Known
Water	None Known	None Known	None Known

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Microtox	Daphnia Magna (Water Flea)
Titriplex IV	None Known	None Known	None Known	None Known
Methyl alcohol	None Known	LC50 13500 - 17600 mg/L Lepomis macrochirus 96 h LC50 18 - 20 mL/L Oncorhynchus mykiss 96 h LC50 19500 - 20700 mg/L Oncorhynchus mykiss 96 h LC50= 28200 mg/L Pimephales promelas 96 h LC50> 100 mg/L Pimephales promelas 96 h	EC50 = 39000 mg/L 25 min EC50 = 40000 mg/L 15 min EC50 = 43000 mg/L 5 min	None Known
Formaldehyde	None Known	LC50= 0.10 mg/L Lepomis macrochirus 96 h LC50= 24.1 mg/L Pimephales promelas 96 h LC50= 41 mg/L Brachydanio rerio 96 h	EC50 = 1.2 mg/L 1 h EC50 = 16.5 mg/L 30 min EC50 = 3.7 mg/L 5 h EC50 = 5.39 mg/L 72 h EC50 = 6.81 mg/L 25 min EC50 = 7.26 mg/L 15 min EC50 = 9.0 mg/L 5 min	EC50 = 2 mg/L 48 h EC50 = 20 mg/L 96 h
Potassium biphthalate	None Known	None Known	None Known	None Known
Water	None Known	None Known	None Known	None Known

Persistence and Degradability Based on components, product is expected to be readily biodegradable. In the atmosphere, methanol will be photo-oxidized relatively quickly; the half-life ranges between 3 and 30 days. In soil, surface or groundwater, rapid biodegradation is expected with the half-life ranging from 1 to 7 days.

Bioaccumulation/Accumulation This material is not expected to significantly bioaccumulate.

Mobility Will likely be mobile in the environment due to its water solubility.

Chemical Name	Log Pow
Titriplex IV	None Known
Methyl alcohol	= -0.77
Formaldehyde	= 0.35 25 °C
Potassium biphthalate	None Known
Water	None Known

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method Dispose of contents/container in accordance with local regulation.

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Titriplex IV - 87095-89-4	None Known	None Known	None Known	None Known
Methyl alcohol - 67-56-1	None Known	None Known	None Known	None Known
Formaldehyde - 50-00-0	None Known	None Known	None Known	None Known
Potassium biphthalate - 877-24-7	None Known	None Known	None Known	None Known
Water - 7732-18-5	None Known	None Known	None Known	None Known

14. TRANSPORT INFORMATION

DOT Not regulated

IATA Not regulated

IMDG/IMO Not regulated

15. REGULATORY INFORMATION

International Inventories

Component	TSCA	DSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Titriplex IV 87095-89-4 (0.004)	TSCA	DSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Methyl alcohol 67-56-1 (0.008)	Present	X	X	(2)-201	X	KECL	X	X
Formaldehyde 50-00-0 (0.02)	Present	X	X	2-482	X	KE-17074	X	X
Potassium biphthalate 877-24-7 (0.02)	Present	X	X	2-1272; 3-1272; 3-1342	X	KE-02310	X	X
Water 7732-18-5 (to 100%)	Present	X	X	ENCS	X	KE-35400	X	X

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product is not a chemical which is subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372 (Contains less than 0.1% (0.02) Formaldehyde which is less than the threshold value of 0.1%)

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Titriplex IV	87095-89-4	0.004	None Known
Methyl alcohol	67-56-1	0.008	1.0
Formaldehyde	50-00-0	0.02	0.1
Potassium biphthalate	877-24-7	0.02	None Known
Water	7732-18-5	to 100%	None Known

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Titriplex IV 87095-89-4 (0.004)	None Known	None Known	None Known	None Known
Methyl alcohol 67-56-1 (0.008)	None Known	None Known	None Known	None Known
Formaldehyde 50-00-0 (0.02)	100 lb	None Known	None Known	X
Potassium biphthalate 877-24-7 (0.02)	None Known	None Known	None Known	None Known

Water 7732-18-5 (to 100%)	None Known	None Known	None Known	None Known
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Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following HAPs:.

Chemical Name	CAS-No	Weight %	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Titriplex IV	87095-89-4	0.004	None Known	None Known	None Known	None Known
Methyl alcohol	67-56-1	0.008	Present	Group IV	None Known	None Known
Formaldehyde	50-00-0	0.02	Present	Group I	None Known	None Known
Potassium biphthalate	877-24-7	0.02	None Known	None Known	None Known	None Known
Water	7732-18-5	to 100%	None Known	None Known	None Known	None Known

CERCLA

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Titriplex IV	None Known	None Known
Methyl alcohol	5000 lb	None Known
Formaldehyde	100 lb	100 lb
Potassium biphthalate	None Known	None Known
Water	None Known	None Known

U.S. State Regulations**California Proposition 65**

WARNING! This product contains chemicals know to the State of California to cause cancer and birth defects or other reproductive harm

Chemical Name	CAS-No	California Prop. 65
Titriplex IV	87095-89-4	None Known
Methyl alcohol	67-56-1	Developmental
Formaldehyde	50-00-0	Carcinogen
Potassium biphthalate	877-24-7	None Known
Water	7732-18-5	None Known

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Titriplex IV	None Known	None Known	None Known	None Known	None Known
Methyl alcohol	X	X	X	X	X
Formaldehyde	X	X	X	X	X
Potassium biphthalate	None Known	None Known	None Known	None Known	None Known
Water	None Known	None Known	None Known	None Known	None Known

International Regulations**Mexico - Grade**

Chemical Name	Carcinogen Status	Exposure Limits
Titriplex IV	None Known	None Known
Methyl alcohol	None Known	Mexico: TWA 200 ppm Mexico: TWA 260 mg/m ³
Formaldehyde	A2	None Known
Potassium biphthalate	None Known	None Known
Water	None Known	None Known

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR. NOT WHMIS CONTROLLED

Component	WHMIS Hazard Class
Titriplex IV 87095-89-4 (0.004)	Not determined
Methyl alcohol 67-56-1 (0.008)	1 % B2 D1B D2A D2B

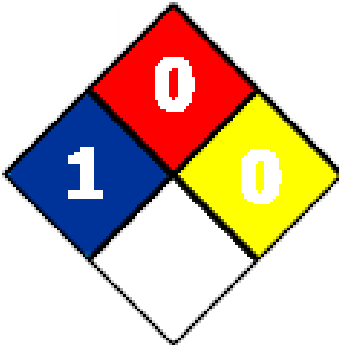

Formaldehyde 50-00-0 (0.02)	0.1 % A B1 D1A D2A D2B B3 D1A D2A D2B E
Potassium biphthalate 877-24-7 (0.02)	Uncontrolled product according to WHMIS classification criteria
Water 7732-18-5 (to 100%)	Uncontrolled product according to WHMIS classification criteria

Chemical Name	NPRI
Methyl alcohol	X
Formaldehyde	X

Legend

X - Listed

16. OTHER INFORMATION

NFPA	HMIS	PPE	Transport Symbol						
	<table border="1"> <tr> <td>Health Hazard</td> <td style="text-align: center;">1</td> </tr> <tr> <td>Fire Hazard</td> <td style="text-align: center;">0</td> </tr> <tr> <td>Reactivity</td> <td style="text-align: center;">0</td> </tr> </table>	Health Hazard	1	Fire Hazard	0	Reactivity	0		
Health Hazard	1								
Fire Hazard	0								
Reactivity	0								

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 Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of MSDS