



# Merfin Mates 9400

## Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Date of Issue: 12/05/2019

Version: 1.0

### SECTION 1: IDENTIFICATION

#### 1.1. Product Identifier

Product Form: Mixture

Product Name: Merfin Mates 9400

#### 1.2. Intended Use of the Product

Hard Surface Cleaner.

#### 1.3. Name, Address, and Telephone of the Responsible Party

##### Company

NPS Corporation

3303 Spirit Way

Green Bay, WI 54304

800-558-5066

web: [www.npscorp.com](http://www.npscorp.com)

email: [cs@npscorp.com](mailto:cs@npscorp.com)

#### 1.4. Emergency Telephone Number

Emergency Number : (800) 424-9300 (USA); +1 (703) 527-3887 (International and Maritime) CHEMTREC

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1. Classification of the Substance or Mixture

##### GHS-US/CA Classification

Eye Irrit. 2A H319

Full text of hazard classes and H-statements : see section 16

#### 2.2. Label Elements

##### GHS-US/CA Labeling

##### Hazard Pictograms (GHS-US/CA)



GHS07

##### Signal Word (GHS-US/CA)

: Warning

##### Hazard Statements (GHS-US/CA)

: H319 - Causes serious eye irritation.

##### Precautionary Statements (GHS-US/CA)

: P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.  
P280 - Wear protective gloves, protective clothing, and eye protection.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337+P313 - If eye irritation persists: Get medical advice/attention.

#### 2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

#### 2.4. Unknown Acute Toxicity (GHS-US/CA)

No data available

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

Name	Synonyms	Product Identifier	% *	GHS Ingredient Classification
Water	AQUA / Aqua	(CAS-No.) 7732-18-5	90.7565	Not classified
Sodium 1-octanesulfonate	Sodium octane-1-sulphonate monohydrate / 1-Octanesulfonic acid / 1-Octanesulfonate, sodium / Sodium octane-1-sulphonate /	(CAS-No.) 5324-84-5	2.625	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335

# Merfin Mates 9400

## Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

	1-Octanesulfonic acid, sodium salt (1:1) / Sodium octanesulphonate / Octylsulfonate, sodium / 1-Octanesulfonic acid, sodium salt			
Pentanedioic acid, 1,5-dimethyl ester	Dimethyl glutarate / Pentanedioic acid, dimethyl ester / Glutaric acid, dimethyl ester / DIMETHYL GLUTARATE / DBE 5 / Dimethyl pentanedioate	(CAS-No.) 1119-40-0	2.44	Aquatic Acute 3, H402 Aquatic Chronic 3, H412
Butanedioic acid, dimethyl ester	Dimethyl ethane-1,2-dicarboxylate / DBE 4 / DIMETHYL SUCCINATE / Butanedioic acid, 1,4-dimethyl ester / Succinic acid, dimethyl ester / Dimethyl butanedioate / Dimethyl succinate	(CAS-No.) 106-65-0	0.84	Flam. Liq. 4, H227 Aquatic Acute 3, H402 Aquatic Chronic 3, H412
Hexanedioic acid, 1,6-dimethyl ester	Dimethyl adipate / Adipic acid, dimethyl ester / Hexanedioic acid, dimethyl ester / DIMETHYL ADIPATE / DBE 6 / Dimethyl hexane-1,6-dioate	(CAS-No.) 627-93-0	0.72	Aquatic Acute 3, H402 Aquatic Chronic 3, H412
Isopropyl alcohol	2-Hydroxypropane / 2-Propyl alcohol / 2-Propanol / Isopropanol / Propan-2-ol / ISOPROPYL ALCOHOL / Propanol, 2- / Isopropyl alcohol	(CAS-No.) 67-63-0	0.245	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336
Sodium sulfate	Disodium sulfate / Sodium sulfate (2:1) / Sodium sulphate / Sulfuric acid, disodium salt / Sodium sulphate, anhydrous / Sulfuric acid sodium salt (1:2) / SODIUM SULFATE / Disodium sulphate / Sulfuric acid, disodium salt (1:2) / Sodium sulfate, anhydrous	(CAS-No.) 7757-82-6	0.21	Not classified
1,2-Propanediol	1,2-Propylene glycol / 1,2-Dihydroxypropane / Propane-1,2-diol / Propylene glycol / PROPYLENE GLYCOL	(CAS-No.) 57-55-6	0.1	Not classified
Glutaraldehyde	1,3-Diformylpropane / Glutardialdehyde / 1,5-Pentanedial / Pentanedial / Glutaraldehyde, activated and inactivated / Glutaral / GLUTARAL / Glutaric dialdehyde / Glutaric aldehyde	(CAS-No.) 111-30-8	0.05	Flam. Liq. 4, H227 Met. Corr. 1, H290 Acute Tox. 3 (Oral), H301 Acute Tox. 4 (Dermal), H312 Acute Tox. 2 (Inhalation:dust,mist), H330 Skin Corr. 1B, H314 Eye Dam. 1, H318 Resp. Sens. 1, H334 Skin Sens. 1A, H317 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
Carbonic acid, dipotassium salt	Potassium carbonate / Potash / Potassium carbonate (2:1) / Carbonic acid, potassium salt (1:2) / POTASSIUM CARBONATE / Dipotassium carbonate / Potassium carbonate, anhydrous	(CAS-No.) 584-08-7	0.0235	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
2H-1-Benzopyran-6-ol, 3,4-	Acetate, .alpha.-tocopheryl /	(CAS-No.) 7695-91-2	0.01	Not classified

# Merfin Mates 9400

## Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-, acetate	3,4-Dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-yl acetate / 3,4-Dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-1-benzopyran-6-yl acetate / 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-, 6-acetate / TOCOPHERYL ACETATE / Tocopheryl acetate / dl-.alpha.-Tocopheryl acetate / Tocopherol acetate / .alpha.-Tocopherol acetate / 3,4-Dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyl)-2H-1-benzopyran-6-yl acetate / 3,4-Dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyl)-2H-1-benzopyran-6-ol acetate / (2R)-2,5,7,8-Tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecan-1-yl]chroman-6-yl acetate / DL-.alpha.-Tocopheryl acetate / Vitamin E acetate			
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Full text of H-phrases: see section 16

\*Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%).

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of First-aid Measures

**General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**Inhalation:** When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

**Skin Contact:** Immediately drench affected area with water for at least 15 minutes. Remove contaminated clothing. Obtain medical attention if irritation develops or persists.

**Eye Contact:** Immediately rinse with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

**Ingestion:** Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

### 4.2. Most Important Symptoms and Effects Both Acute and Delayed

**General:** Causes serious eye irritation.

**Inhalation:** Prolonged exposure may cause irritation.

**Skin Contact:** Prolonged exposure may cause skin irritation.

**Eye Contact:** Contact causes severe irritation with redness and swelling of the conjunctiva.

**Ingestion:** Ingestion may cause adverse effects.

**Chronic Symptoms:** None expected under normal conditions of use.

### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

## SECTION 5: FIRE-FIGHTING MEASURES

### 5.1. Extinguishing Media

**Suitable Extinguishing Media:** Water spray, fog, carbon dioxide (CO<sub>2</sub>), alcohol-resistant foam, or dry chemical.

**Unsuitable Extinguishing Media:** Do not use a heavy water stream. Use of heavy stream of water may spread fire.

### 5.2. Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Not considered flammable but may burn at high temperatures.

**Explosion Hazard:** Product is not explosive.

# Merfin Mates 9400

## Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

**Reactivity:** Hazardous reactions will not occur under normal conditions.

### 5.3. Advice for Firefighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire.

**Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

**Hazardous Combustion Products:** Carbon oxides (CO, CO<sub>2</sub>). Nitrogen compounds. Sulfur oxides.

### 5.4. Reference to Other Sections

Refer to Section 9 for flammability properties.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapor, mist, spray).

#### 6.1.1. For Non-Emergency Personnel

**Protective Equipment:** Use appropriate personal protective equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

#### 6.1.2. For Emergency Personnel

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

### 6.2. Environmental Precautions

Prevent entry to sewers and public waters.

### 6.3. Methods and Materials for Containment and Cleaning Up

**For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

**Methods for Cleaning Up:** Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

### 6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for Safe Handling

**Additional Hazards When Processed:** Handle in accordance with standard industrial practices, and ensure appropriate ventilation. Avoid all contact with skin, eyes, clothing. Do not release into the environment.

**Precautions for Safe Handling:** Avoid contact with skin, eyes and clothing. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid breathing vapors, mist, spray.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures.

### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Comply with applicable regulations.

**Storage Conditions:** Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

**Incompatible Materials:** Strong acids. Strong bases. Strong oxidizers. Amines. Water-Reactive Materials.

### 7.3. Specific End Use(s)

Hard Surface Cleaner.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), or Canadian provincial governments.

1,2-Propanediol (57-55-6)		
USA AIHA	WEEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Ontario	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (for assessing the visibility in a work environment where 1,2-Propylene glycol aerosol is present-aerosol only)

# Merfin Mates 9400

## Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

		155 mg/m <sup>3</sup> (aerosol and vapor)
<b>Ontario</b>	OEL TWA (ppm)	50 ppm (aerosol and vapor)
<b>Isopropyl alcohol (67-63-0)</b>		
<b>USA ACGIH</b>	ACGIH TWA (ppm)	200 ppm
<b>USA ACGIH</b>	ACGIH STEL (ppm)	400 ppm
<b>USA ACGIH</b>	ACGIH chemical category	Not Classifiable as a Human Carcinogen
<b>USA ACGIH</b>	Biological Exposure Indices (BEI)	40 mg/l Parameter: Acetone - Medium: urine - Sampling time: end of shift at end of workweek (background, nonspecific)
<b>USA OSHA</b>	OSHA PEL (TWA) (mg/m <sup>3</sup> )	980 mg/m <sup>3</sup>
<b>USA OSHA</b>	OSHA PEL (TWA) (ppm)	400 ppm
<b>USA NIOSH</b>	NIOSH REL (TWA) (mg/m <sup>3</sup> )	980 mg/m <sup>3</sup>
<b>USA NIOSH</b>	NIOSH REL (TWA) (ppm)	400 ppm
<b>USA NIOSH</b>	NIOSH REL (STEL) (mg/m <sup>3</sup> )	1225 mg/m <sup>3</sup>
<b>USA NIOSH</b>	NIOSH REL (STEL) (ppm)	500 ppm
<b>USA IDLH</b>	US IDLH (ppm)	2000 ppm (10% LEL)
<b>Alberta</b>	OEL STEL (mg/m <sup>3</sup> )	984 mg/m <sup>3</sup>
<b>Alberta</b>	OEL STEL (ppm)	400 ppm
<b>Alberta</b>	OEL TWA (mg/m <sup>3</sup> )	492 mg/m <sup>3</sup>
<b>Alberta</b>	OEL TWA (ppm)	200 ppm
<b>British Columbia</b>	OEL STEL (ppm)	400 ppm
<b>British Columbia</b>	OEL TWA (ppm)	200 ppm
<b>Manitoba</b>	OEL STEL (ppm)	400 ppm
<b>Manitoba</b>	OEL TWA (ppm)	200 ppm
<b>New Brunswick</b>	OEL STEL (mg/m <sup>3</sup> )	1230 mg/m <sup>3</sup>
<b>New Brunswick</b>	OEL STEL (ppm)	500 ppm
<b>New Brunswick</b>	OEL TWA (mg/m <sup>3</sup> )	983 mg/m <sup>3</sup>
<b>New Brunswick</b>	OEL TWA (ppm)	400 ppm
<b>Newfoundland &amp; Labrador</b>	OEL STEL (ppm)	400 ppm
<b>Newfoundland &amp; Labrador</b>	OEL TWA (ppm)	200 ppm
<b>Nova Scotia</b>	OEL STEL (ppm)	400 ppm
<b>Nova Scotia</b>	OEL TWA (ppm)	200 ppm
<b>Nunavut</b>	OEL STEL (ppm)	400 ppm
<b>Nunavut</b>	OEL TWA (ppm)	200 ppm
<b>Northwest Territories</b>	OEL STEL (ppm)	400 ppm
<b>Northwest Territories</b>	OEL TWA (ppm)	200 ppm
<b>Ontario</b>	OEL STEL (ppm)	400 ppm
<b>Ontario</b>	OEL TWA (ppm)	200 ppm
<b>Prince Edward Island</b>	OEL STEL (ppm)	400 ppm
<b>Prince Edward Island</b>	OEL TWA (ppm)	200 ppm
<b>Québec</b>	VECD (mg/m <sup>3</sup> )	1230 mg/m <sup>3</sup>
<b>Québec</b>	VECD (ppm)	500 ppm
<b>Québec</b>	VEMP (mg/m <sup>3</sup> )	985 mg/m <sup>3</sup>
<b>Québec</b>	VEMP (ppm)	400 ppm
<b>Saskatchewan</b>	OEL STEL (ppm)	400 ppm
<b>Saskatchewan</b>	OEL TWA (ppm)	200 ppm
<b>Yukon</b>	OEL STEL (mg/m <sup>3</sup> )	1225 mg/m <sup>3</sup>
<b>Yukon</b>	OEL STEL (ppm)	500 ppm
<b>Yukon</b>	OEL TWA (mg/m <sup>3</sup> )	980 mg/m <sup>3</sup>
<b>Yukon</b>	OEL TWA (ppm)	400 ppm
<b>Glutaraldehyde (111-30-8)</b>		

# Merfin Mates 9400

## Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

USA ACGIH	ACGIH Ceiling (ppm)	0.05 ppm (activated and inactivated)
USA ACGIH	ACGIH chemical category	dermal sensitizer activated or unactivated, Not Classifiable as a Human Carcinogen activated and inactivated
USA NIOSH	NIOSH REL (ceiling) (mg/m <sup>3</sup> )	0.8 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (ceiling) (ppm)	0.2 ppm
Alberta	OEL Ceiling (mg/m <sup>3</sup> )	0.2 mg/m <sup>3</sup> (activated and inactivated)
Alberta	OEL Ceiling (ppm)	0.05 ppm (activated and inactivated)
British Columbia	OEL Ceiling (ppm)	0.05 ppm (activated and inactivated)
Manitoba	OEL Ceiling (ppm)	0.05 ppm (activated and inactivated)
New Brunswick	OEL Ceiling (mg/m <sup>3</sup> )	0.2 mg/m <sup>3</sup>
New Brunswick	OEL Ceiling (ppm)	0.05 ppm
Newfoundland & Labrador	OEL Ceiling (ppm)	0.05 ppm (activated and inactivated)
Nova Scotia	OEL Ceiling (ppm)	0.05 ppm (activated and inactivated)
Nunavut	OEL Ceiling (ppm)	0.05 ppm (activated and inactivated)
Northwest Territories	OEL Ceiling (ppm)	0.05 ppm (activated and inactivated)
Ontario	OEL Ceiling (ppm)	0.05 ppm (activated or inactivated)
Prince Edward Island	OEL Ceiling (ppm)	0.05 ppm (activated and inactivated)
Québec	PLAFOND (mg/m <sup>3</sup> )	0.41 mg/m <sup>3</sup>
Québec	PLAFOND (ppm)	0.1 ppm
Saskatchewan	OEL Ceiling (ppm)	0.05 ppm (activated or unactivated)
Yukon	OEL Ceiling (mg/m <sup>3</sup> )	0.25 mg/m <sup>3</sup> (activated or unactivated)

## 8.2. Exposure Controls

**Appropriate Engineering Controls:** Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

**Personal Protective Equipment:** Gloves. Protective clothing. Protective goggles.



**Materials for Protective Clothing:** Chemically resistant materials and fabrics.

**Hand Protection:** Wear protective gloves.

**Eye and Face Protection:** Chemical safety goggles.

**Skin and Body Protection:** Wear suitable protective clothing.

**Respiratory Protection:** If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

**Other Information:** When using, do not eat, drink or smoke.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Translucent Liquid
Odor	: None
Odor Threshold	: Not available
pH	: 5 - 7
Evaporation Rate	: Not available
Melting Point	: Not available
Freezing Point	: Not available
Boiling Point	: Not available
Flash Point	: Not Available
Auto-ignition Temperature	: Not available

# Merfin Mates 9400

## Safety Data Sheet

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<b>Decomposition Temperature</b>	: Not available
<b>Flammability (solid, gas)</b>	: Not applicable
<b>Lower Flammable Limit</b>	: Not available
<b>Upper Flammable Limit</b>	: Not available
<b>Vapor Pressure</b>	: Not available
<b>Relative Vapor Density at 20°C</b>	: Not available
<b>Relative Density</b>	: Not available
<b>Density</b>	: 8.46 lb/gal
<b>Specific Gravity</b>	: 1.01
<b>Solubility</b>	: Not available
<b>Partition Coefficient: N-Octanol/Water</b>	: Not available
<b>Viscosity</b>	: Not available
<b>VOC content</b>	: 0.35 %

### SECTION 10: STABILITY AND REACTIVITY

- 10.1. Reactivity:** Hazardous reactions will not occur under normal conditions.
- 10.2. Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).
- 10.3. Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
- 10.4. Conditions to Avoid:** Direct sunlight, extremely high or low temperatures, and incompatible materials.
- 10.5. Incompatible Materials:** Strong acids. Strong bases. Strong oxidizers. Amines. Water-Reactive Materials.
- 10.6. Hazardous Decomposition Products:** None expected under normal conditions of use.

### SECTION 11: TOXICOLOGICAL INFORMATION

#### 11.1. Information on Toxicological Effects - Product

**Acute Toxicity (Oral):** Not classified

**Acute Toxicity (Dermal):** Not classified

**Acute Toxicity (Inhalation):** Not classified

**LD50 and LC50 Data:** Not available

**Skin Corrosion/Irritation:** Not classified

**pH:** 5 - 7

**Eye Damage/Irritation:** Causes serious eye irritation.

**pH:** 5 - 7

**Respiratory or Skin Sensitization:** Not classified

**Germ Cell Mutagenicity:** Not classified

**Carcinogenicity:** Not classified

**Specific Target Organ Toxicity (Repeated Exposure):** Not classified

**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** Not classified

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** Prolonged exposure may cause irritation.

**Symptoms/Injuries After Skin Contact:** Prolonged exposure may cause skin irritation.

**Symptoms/Injuries After Eye Contact:** Contact causes severe irritation with redness and swelling of the conjunctiva.

**Symptoms/Injuries After Ingestion:** Ingestion may cause adverse effects.

**Chronic Symptoms:** None expected under normal conditions of use.

#### 11.2. Information on Toxicological Effects - Ingredient(s)

**LD50 and LC50 Data:**

<b>1,2-Propanediol (57-55-6)</b>	
<b>LD50 Oral Rat</b>	20 g/kg
<b>LD50 Dermal Rabbit</b>	20800 mg/kg
<b>Isopropyl alcohol (67-63-0)</b>	
<b>LD50 Dermal Rabbit</b>	12956 mg/kg (16.4 mL/kg bw)
<b>LC50 Inhalation Rat</b>	72600 mg/m <sup>3</sup> (Exposure time: 4 h)

# Merfin Mates 9400

## Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

<b>Butanedioic acid, dimethyl ester (106-65-0)</b>	
LD50 Oral Rat	> 5 g/kg
LD50 Dermal Rabbit	> 5 g/kg
<b>Glutaraldehyde (111-30-8)</b>	
LD50 Oral Rat	77 mg/kg 77 mg/kg bw for pure glutaraldehyde; 1984 EPA Assessment Guideline 40 CFR Part 158
LD50 Dermal Rabbit	1800 mg/kg
LC50 Inhalation Rat	0.1 mg/l/4h
LC50 Inhalation Rat	0.48 mg/l/4h
<b>Carbonic acid, dipotassium salt (584-08-7)</b>	
LD50 Oral Rat	1983 mg/kg body weight
LD50 Dermal Rabbit	> 2000 mg/kg
<b>Hexanedioic acid, 1,6-dimethyl ester (627-93-0)</b>	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rabbit	> 5000 mg/kg
<b>Pentanedioic acid, 1,5-dimethyl ester (1119-40-0)</b>	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rabbit	> 5000 mg/kg
LC50 Inhalation Rat	> 5.6 mg/l/4h
<b>Sodium sulfate (7757-82-6)</b>	
LD50 Oral Rat	> 5000 mg/kg (Estimated OECD SIDS)
<b>Isopropyl alcohol (67-63-0)</b>	
IARC Group	3

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

Ecology - General: Not classified.

<b>1,2-Propanediol (57-55-6)</b>	
LC50 Fish 1	51600 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 1	10000 mg/l (Exposure time: 24 h - Species: Daphnia magna)
LC50 Fish 2	41 - 47 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 2	1000 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
<b>Isopropyl alcohol (67-63-0)</b>	
LC50 Fish 1	9640 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	13299 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 Other Aquatic Organisms 1	1000 mg/l (Exposure time: 96 h - Species: Desmodemus subspicatus)
LC50 Fish 2	11130 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Other Aquatic Organisms 2	1000 mg/l (Exposure time: 72 h - Species: Desmodemus subspicatus)
<b>Butanedioic acid, dimethyl ester (106-65-0)</b>	
LC50 Fish 1	50 - 100 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])
<b>Glutaraldehyde (111-30-8)</b>	
LC50 Fish 1	7.8 - 22 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 1	14 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 Fish 2	2.6 - 4.8 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
EC50 Daphnia 2	0.56 - 1.0 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
<b>Carbonic acid, dipotassium salt (584-08-7)</b>	
EC50 Daphnia 1	630 mg/l
<b>Hexanedioic acid, 1,6-dimethyl ester (627-93-0)</b>	
EC50 Daphnia 1	72 mg/l
<b>Pentanedioic acid, 1,5-dimethyl ester (1119-40-0)</b>	



# Merfin Mates 9400

## Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

LC50 Fish 1	19.6 - 26.2 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 1	122.1 - 163.5 mg/l (Exposure time: 48 h - Species: Daphnia magna)
<b>2H-1-Benzopyran-6-ol, 3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-, acetate (7695-91-2)</b>	
LC50 Fish 1	> 100 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
<b>Sodium sulfate (7757-82-6)</b>	
LC50 Fish 1	13500 (13500 - 14500) mg/l (Exposure time: 96 h - Species: Pimephales promelas)
EC50 Daphnia 1	2564 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 Fish 2	> 6800 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])

### 12.2. Persistence and Degradability

Merfin Mates 9400	
Persistence and Degradability	Not established.

### 12.3. Bioaccumulative Potential

Merfin Mates 9400	
Bioaccumulative Potential	Not established.
<b>1,2-Propanediol (57-55-6)</b>	
BCF Fish 1	< 1
Log Pow	-0.92
<b>Isopropyl alcohol (67-63-0)</b>	
Log Pow	0.05 (at 25 °C)
<b>Butanedioic acid, dimethyl ester (106-65-0)</b>	
Log Pow	0.19 (at 25 °C)
<b>Glutaraldehyde (111-30-8)</b>	
Log Pow	0.22 (at 25 °C)

12.4. Mobility in Soil Not available

### 12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

**Waste Disposal Recommendations:** Destroy and dispose of in accordance with applicable local, state, provincial, territorial, federal and international regulations.

**Additional Information:** Container may remain hazardous when empty. Continue to observe all precautions.

**Ecology - Waste Materials:** Avoid release to the environment.

## SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

14.1. In Accordance with DOT Not regulated for transport

14.2. In Accordance with IMDG Not regulated for transport

14.3. In Accordance with IATA Not regulated for transport

14.4. In Accordance with TDG Not regulated for transport

## SECTION 15: REGULATORY INFORMATION

### 15.1. US Federal Regulations

Merfin Mates 9400	
SARA Section 311/312 Hazard Classes	Health hazard - Serious eye damage or eye irritation
<b>1,2-Propanediol (57-55-6)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Isopropyl alcohol (67-63-0)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
SARA Section 313 - Emission Reporting	1 % (only if manufactured by the strong acid process, no supplier)

# Merfin Mates 9400

## Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

	notification)
<b>Butanedioic acid, dimethyl ester (106-65-0)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Glutaraldehyde (111-30-8)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Carbonic acid, dipotassium salt (584-08-7)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Hexanedioic acid, 1,6-dimethyl ester (627-93-0)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Pentanedioic acid, 1,5-dimethyl ester (1119-40-0)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Sodium 1-octanesulfonate (5324-84-5)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>2H-1-Benzopyran-6-ol, 3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-, acetate (7695-91-2)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Water (7732-18-5)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Sodium sulfate (7757-82-6)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

### 15.2. US State Regulations

<b>1,2-Propanediol (57-55-6)</b>
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
<b>Isopropyl alcohol (67-63-0)</b>
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - Pennsylvania - RTK (Right to Know) List
<b>Glutaraldehyde (111-30-8)</b>
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
<b>Sodium sulfate (7757-82-6)</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - Pennsylvania - RTK (Right to Know) List

### 15.3. Canadian Regulations

<b>1,2-Propanediol (57-55-6)</b>
Listed on the Canadian DSL (Domestic Substances List)
<b>Isopropyl alcohol (67-63-0)</b>
Listed on the Canadian DSL (Domestic Substances List)
<b>Butanedioic acid, dimethyl ester (106-65-0)</b>
Listed on the Canadian DSL (Domestic Substances List)
<b>Glutaraldehyde (111-30-8)</b>
Listed on the Canadian DSL (Domestic Substances List)
<b>Carbonic acid, dipotassium salt (584-08-7)</b>
Listed on the Canadian DSL (Domestic Substances List)

# Merfin Mates 9400

## Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

<b>Hexanedioic acid, 1,6-dimethyl ester (627-93-0)</b>
Listed on the Canadian DSL (Domestic Substances List)
<b>Pentanedioic acid, 1,5-dimethyl ester (1119-40-0)</b>
Listed on the Canadian DSL (Domestic Substances List)
<b>Sodium 1-octanesulfonate (5324-84-5)</b>
Listed on the Canadian DSL (Domestic Substances List)
<b>2H-1-Benzopyran-6-ol, 3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-, acetate (7695-91-2)</b>
Listed on the Canadian DSL (Domestic Substances List)
<b>Water (7732-18-5)</b>
Listed on the Canadian DSL (Domestic Substances List)
<b>Sodium sulfate (7757-82-6)</b>
Listed on the Canadian DSL (Domestic Substances List)

## SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Date of Preparation or Latest Revision** : 12/05/2019

### Revision

**Other Information** : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR) SOR/2015-17.

### GHS Full Text Phrases:

Acute Tox. 2 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 2
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 2	Flammable liquids Category 2
Flam. Liq. 4	Flammable liquids Category 4
Met. Corr. 1	Corrosive to metals Category 1
Resp. Sens. 1	Respiratory sensitization, Category 1
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1A	Skin sensitization, category 1A
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapor
H227	Combustible liquid
H290	May be corrosive to metals
H301	Toxic if swallowed
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction

# Merfin Mates 9400

## Safety Data Sheet

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H318	Causes serious eye damage
H319	Causes serious eye irritation
H330	Fatal if inhaled
H334	May cause an allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H400	Very toxic to aquatic life
H402	Harmful to aquatic life
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*

NA GHS SDS 2015 (Can, US)