



# ProSeal X

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS-CA)
Tris(2-chloroisopropyl) phosphate	Tris(2-chloroisopropyl) phosphate	(CAS-No.) 1244733-77-4	6.97	Acute Tox. 4 (Oral), H302
2,2' -oxybisethanol; diethylene glycol	2,2' -oxybisethanol; diethylene glycol	(CAS-No.) 111-46-6	3.3 - 5.74	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
1,3-Propanediamine, N-[3-(dimethylamino)propyl]-N,N',N'-trimethyl-	N-[3-(Dimethylamino)propyl]-N,N',N'-trimethylpropane-1,3-diamine / N,N'-[(Methylimino)bis(trimethylene)]bis(dimethylamine) / Propane-1,3-diamine, N-(3-(dimethylamino)propyl)-N,N',N'-trimethyl- / 1,3-Propanediamine, N1-[3-(dimethylamino)propyl]-N1,N3,N3-trimethyl- / 2,6,10-Trimethyl-2,6,10-triazaundecane / 1,3-Propanediamine, N-[3-(dimethylamino)propyl]-N1,N3,N5-trimethyl-	(CAS-No.) 3855-32-1	< 100	Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Skin Corr. 1B, H314 Eye Dam. 1, H318
1,3-Propanediamine, N,N-bis[3-(dimethylamino)propyl]-N',N'-dimethyl-	N,N-Bis[3-(dimethylamino)propyl]-N',N'-dimethylpropane-1,3-diamine / 1,3-Propanediamine, N1,N1-bis[3-(dimethylamino)propyl]-N3,N3-dimethyl- / Tris[3-(dimethylamino)propyl]amine / N,N-Bis(3-(dimethylamino)propyl)-N',N'-dimethyl-1,3-propanediamine	(CAS-No.) 33329-35-0	> 1.5	Acute Tox. 4 (Dermal), H312 Skin Corr. 1C, H314 Eye Dam. 1, H318
Cyclohexanamine, N-cyclohexyl-N-methyl-	N-Cyclohexyl-N-methylcyclohexylamine / Dicyclohexylamine, N-methyl- / Cyclohexanamine, N-cyclohexyl-Nmethyl- / N-Methyldicyclohexylamine / N,N-Dicyclohexylmethylamine / N-Cyclohexyl-N-methylcyclohexanamine	(CAS-No.) 7560-83-0	> 1.5	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318
Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-(2-aminomethylethyl)-.omega.-(2-aminomethylethoxy)-	Propylene glycol diamine, 2-amino-, diether with Propylene / Polypropylene glycol bis(2-aminopropyl) ether / Jeffamine D-230 / Diaminopolypropylene glycol / Propylene glycol diamine, 2-amino-, diether with propylene / Polypropylene glycol bis(aminopropyl) ether / Poly(oxy(methyl-1,2-ethanediyl)), .alpha.-(2-aminomethylethyl)-.omega.-(2-aminomethylethoxy)- / Poly(oxypropylene)diamine / Polypropyleneglycol bis(2-aminopropyl) ether / .alpha.-[2-(Aminomethyl)ethyl]-.omega.-(2-aminomethylethoxy)poly[oxy(methylethylene)] / O,O'-Bis(2-aminopropyl)polypropylene glycol / Reaction products of propane-1,2-diol, propoxylated by amination of the terminal hydroxyl groups	(CAS-No.) 9046-10-0	0.66 - 1.1	Acute Tox. 3 (Oral), H301 Skin Corr. 1C, H314 Eye Dam. 1, H318

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

### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

First-aid measures after inhalation	: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Seek medical attention if ill effect or irritation develops.
First-aid measures after skin contact	: Wash skin with plenty of water. Wash contaminated clothing before reuse. Seek medical attention if ill effect or irritation develops.
First-aid measures after eye contact	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek immediate medical advice.
First-aid measures after ingestion	: If accidentally swallowed obtain immediate medical attention. Do not induce vomiting. Never give anything by mouth to an unconscious person.
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).

#### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects	: May cause damage to organs through prolonged or repeated exposure.
Symptoms/effects after inhalation	: Overexposure may be irritating to the respiratory system.
Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after eye contact	: Causes serious eye damage.
Symptoms/effects after ingestion	: May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

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### 4.3. Immediate medical attention and special treatment, if necessary

Note to physician : : Treat symptomatically.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

### 5.2. Unsuitable extinguishing media

Unsuitable extinguishing media : Do not use a heavy water stream.

### 5.3. Specific hazards arising from the hazardous product

Fire hazard : Thermal decomposition can lead to the release of irritating gases and vapours. Toxic and corrosive vapours may be released.

Explosion hazard : No direct explosion hazard.

### 5.4. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.

Protective equipment for firefighters : Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so.

Personal Precautions, Protective Equipment and Emergency Procedures : Evacuate unnecessary personnel. Wear recommended personal protective equipment. Equip cleanup crew with proper protection. Ventilate area.

Prevention Measures for Secondary Accidents : Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### 6.2. Methods and materials for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

### 6.3. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Provide good ventilation in process area to prevent formation of vapour. Avoid all unnecessary exposure. Avoid contact with skin and eyes.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Always wash hands after handling the product. Wash contaminated clothing before reuse. Handle in accordance with good industrial hygiene and safety practice.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool well ventilated place. Keep container closed when not in use.

Incompatible materials : Strong acids. Strong bases.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure adequate ventilation. Provide local exhaust or general room ventilation to minimize vapour concentrations. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

### 8.3. Individual protection measures/Personal protective equipment

#### Hand protection:

Wear impermeable gloves.

#### Eye protection:

Chemical goggles or face shield

#### Skin and body protection:

Long sleeved protective clothing

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### Respiratory protection:

Where excessive vapour, mist, or dust may result, use approved respiratory protection equipment

### Other information:

Do not eat, drink or smoke during use.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear.
Colour	: Colourless
Odour	: characteristic
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Relative evaporation rate (ether=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Vapour pressure at 50 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Explosive limits	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reactivity	: No dangerous reactions known under normal conditions of use.
Chemical stability	: Stable under normal conditions of use.
Possibility of hazardous reactions	: No polymerization. No dangerous reactions known.
Conditions to avoid	: Direct sunlight. Extremely high or low temperatures.
Incompatible materials	: Strong acids. Strong bases.
Hazardous decomposition products	: No hazardous decomposition products known at room temperature. Thermal decomposition can lead to the release of irritating gases and vapours. Toxic and corrosive vapours may be released.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: Not classified (Based on available data, the classification criteria are not met)

#### 2,2' -oxybisethanol; diethylene glycol (111-46-6)

ATE CA (oral)	500 mg/kg bodyweight
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#### 1,3-Propanediamine, N-[3-(dimethylamino)propyl]-N,N',N'-trimethyl- (3855-32-1)

ATE CA (oral)	500 mg/kg bodyweight
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ATE CA (dermal)	300 mg/kg bodyweight
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#### Tris(2-chloroisopropyl) phosphate (1244733-77-4)

ATE CA (oral)	500 mg/kg bodyweight
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### Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-(2-aminomethylethyl)-.omega.-(2-aminomethylethoxy)- (9046-10-0)

LD50 oral rat	242 mg/kg
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### 1,3-Propanediamine, N,N-bis[3-(dimethylamino)propyl]-N',N'-dimethyl- (33329-35-0)

ATE CA (dermal)	1100 mg/kg bodyweight
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### Cyclohexanamine, N-cyclohexyl-N-methyl- (7560-83-0)

LD50 oral rat	446 mg/kg
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Skin corrosion/irritation : Causes skin irritation.  
Serious eye damage/irritation : Causes serious eye damage.  
Respiratory or skin sensitization : Not classified (Based on available data, the classification criteria are not met)  
Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)  
Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)  
Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)  
STOT-single exposure : Not classified (Based on available data, the classification criteria are not met)  
STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

### 2,2'-oxybisethanol; diethylene glycol (111-46-6)

STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
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Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)  
Symptoms/effects : May cause damage to organs through prolonged or repeated exposure.  
Symptoms/effects after inhalation : Overexposure may be irritating to the respiratory system.  
Symptoms/effects after skin contact : Causes skin irritation.  
Symptoms/effects after eye contact : Causes serious eye damage.  
Symptoms/effects after ingestion : May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.  
Other information : Likely routes of exposure: ingestion, inhalation, skin and eye.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : This material has not been tested for environmental effects.

### 12.2. Persistence and degradability

#### Mark IV - High 5

Persistence and degradability	Not established.
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### 12.3. Bioaccumulative potential

#### Mark IV - High 5

Bioaccumulative potential	Not established.
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### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

Effect on the ozone layer : No additional information available.  
Other information : Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.  
Ecology - waste materials : Avoid release to the environment.

## SECTION 14: Transport information

### 14.1. Basic shipping description

In accordance with TDG

#### Transportation of Dangerous Goods

Not regulated for transport

### 14.2. Transport information/DOT

#### Department of Transport

Not regulated for transport

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### 14.3. Air and sea transport

#### IMDG

Not regulated for transport

#### IATA

Not regulated for transport

## SECTION 15: Regulatory information

### 15.1. National regulations

#### 2,2' -oxybisethanol; diethylene glycol (111-46-6)

Listed on the Canadian DSL (Domestic Substances List)

#### 1,3-Propanediamine, N-[3-(dimethylamino)propyl]-N,N',N'-trimethyl- (3855-32-1)

Listed on the Canadian DSL (Domestic Substances List)

#### Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-(2-aminomethylethyl)-.omega.-(2-aminomethylethoxy)- (9046-10-0)

Listed on the Canadian DSL (Domestic Substances List)

#### 1,3-Propanediamine, N,N-bis[3-(dimethylamino)propyl]-N',N'-dimethyl- (33329-35-0)

Listed on the Canadian DSL (Domestic Substances List)

#### Cyclohexanamine, N-cyclohexyl-N-methyl- (7560-83-0)

Listed on the Canadian DSL (Domestic Substances List)

### 15.2. International regulations

#### 2,2' -oxybisethanol; diethylene glycol (111-46-6)

Listed on the AICS (Australian Inventory of Chemical Substances)  
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)  
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)  
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory  
Listed on the Japanese ISHL (Industrial Safety and Health Law)  
Listed on the Korean ECL (Existing Chemicals List)  
Listed on NZIoC (New Zealand Inventory of Chemicals)  
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)  
Listed on the United States TSCA (Toxic Substances Control Act) inventory  
Listed on INSQ (Mexican National Inventory of Chemical Substances)  
Listed on Turkish inventory of chemical

#### 1,3-Propanediamine, N-[3-(dimethylamino)propyl]-N,N',N'-trimethyl- (3855-32-1)

Listed on the AICS (Australian Inventory of Chemical Substances)  
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)  
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)  
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Listed on the United States TSCA (Toxic Substances Control Act) inventory  
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#### Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-(2-aminomethylethyl)-.omega.-(2-aminomethylethoxy)- (9046-10-0)

Listed on the AICS (Australian Inventory of Chemical Substances)  
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)  
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory  
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Listed on the United States TSCA (Toxic Substances Control Act) inventory  
Listed on INSQ (Mexican National Inventory of Chemical Substances)

#### 1,3-Propanediamine, N,N-bis[3-(dimethylamino)propyl]-N',N'-dimethyl- (33329-35-0)

Listed on the AICS (Australian Inventory of Chemical Substances)  
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)  
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)  
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### Cyclohexanamine, N-cyclohexyl-N-methyl- (7560-83-0)

Listed on the AICS (Australian Inventory of Chemical Substances)  
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)  
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)  
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory  
Listed on the Japanese ISHL (Industrial Safety and Health Law)  
Listed on NZIoC (New Zealand Inventory of Chemicals)  
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)  
Listed on the United States TSCA (Toxic Substances Control Act) inventory

### SECTION 16: Other information

Date of issue : 1 August 2018

Other information : None.

Full text of H-statements:

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H373	May cause damage to organs through prolonged or repeated exposure.

SDS Canada (GHS)

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