

# Material Safety Data Sheet



Quantum 2 Steps 2 Straight Curl Eliminator - Step 2

## 1. Product and company identification

<b>Product name</b>	: Quantum 2 Steps 2 Straight Curl Eliminator - Step 2
<b>Manufacturer</b>	: Zotos International, INC. 100 Tokeneke Road. Darien, CT 06820 www.zotos.com
<b>Validation date</b>	: 7/21/2012.
<b>In case of emergency</b>	: (800) 584-8038 [24 Hours]
<b>Telephone number</b>	: (203) 656-7859 [8:30 a.m. - 5:00 p.m.]
<b>Transportation Emergency</b>	: Contact: CHEMTREC 1-800-424-9300 [US/Canada 24 Hours]
<b>Product type</b>	: Liquid.

## 2. Hazards identification

### Emergency overview

NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED. Additional information on toxicological endpoints is available from the supplier upon request

<b>Color</b>	: Off-white.
<b>Odor</b>	: Characteristic.
<b>Hazard statements</b>	: CAUSES EYE AND SKIN IRRITATION.
<b>Precautionary measures</b>	: Do not breathe vapor or mist. Do not eat, drink or smoke when using this product. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.
<b>OSHA/HCS status</b>	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

### Potential acute health effects

<b>Inhalation</b>	: None known.
<b>Ingestion</b>	: Mild irritant
<b>Skin</b>	: Prolonged exposure may result in skin burns and ulcerations.
<b>Eyes</b>	: Prolonged or repeated contact with skin or mucous membrane may result in irritation symptoms, such as redness, blistering, dermatitis etc.

### Potential chronic health effects

<b>Chronic effects</b>	: Contains material that may cause target organ damage, based on animal data.
<b>Carcinogenicity</b>	: No known significant effects or critical hazards.
<b>Mutagenicity</b>	: No known significant effects or critical hazards.
<b>Teratogenicity</b>	: No known significant effects or critical hazards.
<b>Developmental effects</b>	: No known significant effects or critical hazards.
<b>Fertility effects</b>	: No known significant effects or critical hazards.

### Over-exposure signs/symptoms

<b>Inhalation</b>	: No specific data.
<b>Ingestion</b>	: No specific data.
<b>Skin</b>	: Adverse symptoms may include the following: irritation redness
<b>Eyes</b>	: Adverse symptoms may include the following: pain or irritation watering redness

<b>Medical conditions aggravated by over-exposure</b>	: Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.
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### 2. Hazards identification

See toxicological information (Section 11)

### 3. Composition/information on ingredients

Name	CAS number	%
hexadecan-1-ol	36653-82-4	3.2026
hydrogen peroxide	7722-84-1	2.1788
Decacyclopentasiloxane	541-02-6	1.3
propane-1,2-diol	57-55-6	1.0419

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

### 4. First aid measures

- Eye contact** : Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Get medical attention if you feel unwell.
- Skin contact** : Wash the contaminated skin gently and thoroughly with running water and non-abrasive soap.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if you feel unwell.
- Ingestion** : Call physician immediately. Have conscious person drink several glasses of water or milk. Do not induce vomiting. Get medical attention.
- Protection of first-aiders** : Use suitable protective equipment (section 8). Avoid exposure.
- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

### 5. Fire-fighting measures

- Flammability of the product** : None known.
- Extinguishing media** : Extinguish fire using an agent suitable for the surrounding fire.
- Special exposure hazards** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special fire-fighting procedures** : None.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
  - carbon dioxide
  - carbon monoxide
  - nitrogen oxides
  - halogenated compounds
  - metal oxide/oxides
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

### 6. Accidental release measures

- Personal precautions** : Rubber gloves.
- Environmental precautions** : Store in a cool, well-ventilated, dry place. NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED.
- Methods for cleaning up** : Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Place spilled material in an appropriate container for disposal. After contact with skin, wash immediately with plenty of water.

## 7. Handling and storage

- Handling** : Avoid contact with skin and eyes. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10).
- Storage** : Store in a cool, well-ventilated, dry place. Store in a dry place at low temperature away from ignition and heat sources. Avoid increased storage temperature.

## 8. Exposure controls/personal protection

Ingredient	Exposure limits
hydrogen peroxide	<b>ACGIH TLV (United States, 2/2010).</b> TWA: 1 ppm 8 hour(s). TWA: 1.4 mg/m <sup>3</sup> 8 hour(s) <b>OSHA PEL 1989 (United States, 3/1989).</b> TWA: 1 ppm 8 hour(s). TWA: 1.4 mg/m <sup>3</sup> 8 hour(s). <b>NIOSH REL (United States, 6/2009).</b> TWA: 1 ppm 10 hour(s). TWA: 1.4 mg/m <sup>3</sup> 10 hour(s). <b>OSHA PEL (United States, 6/2010).</b> TWA: 1 ppm 8 hour(s). TWA: 1.4 mg/m <sup>3</sup> 8 hour(s).
propane-1,2-diol	<b>AIHA WEEL (United States, 5/2010).</b> TWA: 10 mg/m <sup>3</sup> 8 hour(s).

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.
- Engineering measures** : In case of insufficient ventilation, wear suitable respiratory equipment.
- Hygiene measures** : When using do not eat, drink or smoke.
- Personal protection**
- Respiratory** : Chemical splash goggles. Protective clothing must be worn.
- Hands** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Eyes** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.
- Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
- Other protection** : Not available.

## 9. Physical and chemical properties

- Physical state** : Liquid. [Viscous liquid.]
- Flash point** : Closed cup: Not applicable.
- Color** : Off-white.
- Odor** : Characteristic.
- pH** : 3 to 4
- Boiling/condensation point** : >100°C (>212°F)
- Relative density** : 1.004 to 1.01
- Solubility** : Soluble in the following materials: cold water.

## 10. Stability and reactivity

- Chemical stability** : The product is stable.
- Conditions to avoid** : No specific data.
- Incompatible materials** : No specific data.
- Hazardous decomposition products** : Contaminated product generates oxygen gas pressure build-up
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Hazardous polymerization** : Will not occur.

## 11. Toxicological information

### Acute toxicity

Product/ingredient name	Result	Dose	Exposure
Decacyclopentasiloxane	LD50 Oral	>24134 mg/kg	-
hexadecan-1-ol	LD50 Oral	5 g/kg	-
propane-1,2-diol	LD50 Dermal	20800 mg/kg	-
	LD50 Oral	20 g/kg	-

**Conclusion/Summary** : Not available.

### Chronic toxicity

**Conclusion/Summary** : Not available.

### Irritation/Corrosion

Product/ingredient name	Result	Score	Exposure	Observation
Decacyclopentasiloxane	Eyes - Mild irritant	-	24 hours 500 milligrams	-
	Skin - Mild irritant	-	24 hours 500 milligrams	-
hexadecan-1-ol	Eyes - Mild irritant	-	82 milligrams	-
	Skin - Mild irritant	-	100 Percent	-
	Skin - Moderate irritant	-	24 hours 100 milligrams	-
	Skin - Mild irritant	-	72 hours 75 milligrams	-
	Skin - Severe irritant	-	Intermittent	-
	Skin - Mild irritant	-	0.2 Percent	-
hydrogen peroxide propane-1,2-diol	Skin - Mild irritant	-	48 hours 50 milligrams	-
	Skin - Severe irritant	-	24 hours 100 milligrams	-
	Skin - Mild irritant	-	24 hours 2600 milligrams	-
	Skin - Severe irritant	-	24 hours 100 milligrams	-
	Eyes - Severe irritant	-	1 milligrams	-
	Eyes - Mild irritant	-	24 hours 500 milligrams	-
	Eyes - Mild irritant	-	100 milligrams	-
	Skin - Moderate irritant	-	96 hours 30 Percent continuous	-
	Skin - Mild irritant	-	168 hours 500 milligrams	-
	Skin - Moderate irritant	-	72 hours 104 milligrams	-
Skin - Mild irritant	-	Intermittent 96 hours 30 Percent	-	

## 11. Toxicological information

**Conclusion/Summary** : Not available.

**Sensitizer**

**Conclusion/Summary** : Not available.

**Carcinogenicity**

**Conclusion/Summary** : No carcinogenic effect.

**Classification**

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
hydrogen peroxide	A3	3	-	-	-	-

**Mutagenicity**

**Conclusion/Summary** : Not available.

**Teratogenicity**

**Conclusion/Summary** : Not available.

**Reproductive toxicity**

**Conclusion/Summary** : Not available.

## 12. Ecological information

**Ecotoxicity** : No known significant effects or critical hazards.

**Aquatic ecotoxicity**

Product/ingredient name	Result	Species	Exposure
hydrogen peroxide	Acute EC50 1.2 mg/L Marine water	Algae - Dunaliella tertiolecta - Exponential growth phase	72 hours
	Acute EC50 5.38 mg/L Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 2320 ug/L Fresh water	Daphnia - Daphnia magna - Neonate - <24 hours	48 hours
	Acute LC50 22 ppm Fresh water	Fish - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
propane-1,2-diol	Acute EC50 >1000 mg/L Fresh water	Daphnia - Daphnia magna - <24 hours	48 hours
	Acute LC50 1020000 ug/L Fresh water	Crustaceans - Ceriodaphnia dubia - <=24 hours	48 hours
	Acute LC50 710000 ug/L Fresh water	Fish - Pimephales promelas - <=7 days	96 hours

**Conclusion/Summary** : Not available.

**Persistence/degradability**

**Conclusion/Summary** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## 13. Disposal considerations

**Waste disposal** : Dispose of according to all federal, state and local applicable regulations.

**Contaminated packaging** : Waste must be disposed of according to applicable regulations. This material and its container must be disposed of as hazardous waste.

**Waste residues information** : Flush with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.

**Disposal should be in accordance with applicable regional, national and local laws and regulations.**

**Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.**

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	Not regulated.	-	-	-		-
TDG Classification	Not regulated.	-	-	-		-
Mexico Classification	Not regulated.	-	-	-		-
ADR/RID Class	Not regulated.	-	-	-		-
IMDG Class	Not regulated.	-	-	-		-
IATA-DGR Class	Not regulated.	-	-	-		-

PG\* : Packing group

## 15. Regulatory information

**HCS Classification** : Irritating material  
Target organ effects

**U.S. Federal regulations** : TSCA : Exempt

**SARA 302/304/311/312 extremely hazardous substances:** Hydrogen Peroxide, aqueous solution

**SARA 302/304 emergency planning and notification:** Hydrogen Peroxide, aqueous solution

**SARA 302/304/311/312 hazardous chemicals:** propane-1,2-diol; Hydrogen Peroxide, aqueous solution

**SARA 311/312 MSDS distribution - chemical inventory - hazard identification:**  
propane-1,2-diol: Immediate (acute) health hazard, Delayed (chronic) health hazard;  
Hydrogen Peroxide, aqueous solution: Fire hazard, reactive, Immediate (acute) health hazard, Delayed (chronic) health hazard

**Clean Water Act (CWA) 311:** Phosphoric Acid

**Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)** : Not listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

### State regulations

**Massachusetts** : The following components are listed: HYDROGEN PEROXIDE

**New York** : The following components are listed: Hydrogen peroxide

**New Jersey** : The following components are listed: HYDROGEN PEROXIDE; PROPYLENE GLYCOL; 1,2-PROPANEDIOL

**Pennsylvania** : The following components are listed: HYDROGEN PEROXIDE (CONC > 52 PERCENT); 1,2-PROPANEDIOL

## 15. Regulatory information

### California Prop. 65

CALIFORNIA PROPOSITION 65: The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986. This product is not known to the State of California to cause cancer.

Canada inventory : Not determined.

### International regulations

Chemical Weapons Convention List Schedule I Chemicals : Not listed

Chemical Weapons Convention List Schedule II Chemicals : Not listed

Chemical Weapons Convention List Schedule III Chemicals : Not listed

## 16. Other information

Hazardous Material Information System (U.S.A.) :

Health	2
Flammability	0
Physical hazards	0

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National Fire Protection Association (U.S.A.) :



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