

Material Safety Data Sheet



QUANTUM 2 STEPS 2 STRAIGHT CURL ELIMINATOR - STEP 1

1. Identification of the material and supplier

Names

- Product name** : QUANTUM 2 STEPS 2 STRAIGHT CURL ELIMINATOR - STEP 1
- Distributor** : SABRE CORPORATION
75 South Creek Road
Dee Why, NSW 2099
Australia
Phone: 02-9982-0100
- Manufacturer** : Zotos International, INC
100 Tokeneke Road,
Darien, CT 06820
www.zotos.com
- Emergency telephone number** : 131126

2. Hazards identification

- Classification** : Not regulated.
- Risk phrases** : Not classified.
- Statement of hazardous/dangerous nature** : NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.

NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED.

3. Composition/information on ingredients

- Mixture** : Yes.

Ingredient name	CAS number	Concentration
Propylene glycol	57-55-6	3.00
White mineral oil (petroleum)	8042-47-5	3.00
octadecan-1-ol	112-92-5	2.10
2-aminoethanol	141-43-5	2.00
hexadecan-1-ol	36653-82-4	2.00

Other ingredients, determined not to be hazardous according to Safe Work Australia criteria, and not dangerous according to the ADG Code, make up the product concentration to 100%.

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

First aid measures

- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if you feel unwell.
- Ingestion** : Get medical attention immediately.
- Skin contact** : Wash contaminated skin with soap and water.
- Eye contact** : Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Get medical attention if you feel unwell.
- Protection of first-aiders** : Use suitable protective equipment (section 8). Avoid exposure.
- Advice to doctor** : 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

- 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.
In a fire or if heated, a pressure increase will occur and the container may burst.
- Special protective equipment for fire-fighters** : In a fire, decomposition may produce toxic gases/fumes. Wear suitable protective clothing.

6. Accidental release measures

- Personal precautions** : Wear protective gloves.
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Methods for cleaning up** : Use a water rinse for final clean-up.

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** : Avoid increased storage temperature.

8. Exposure controls/personal protection

Occupational exposure limits

Ingredient name	Exposure limits
Propylene glycol	Safe Work Australia (Australia, 8/2005). TWA: 10 mg/m ³ 8 hour(s). Form: Particulate TWA: 150 ppm 8 hour(s). Form: Vapor and particulates TWA: 474 mg/m ³ 8 hour(s). Form: Vapor and particulates
White mineral oil (petroleum)	Safe Work Australia (Australia, 8/2005). TWA: 5 mg/m ³ 8 hour(s).
octadecan-1-ol	TRGS900 AGW (Germany, 1/2012). TWA: 224 mg/m ³ 8 hour(s). TWA: 20 ppm 8 hour(s). PEAK: 224 mg/m ³ 15 minute(s). PEAK: 20 ppm 15 minute(s).
2-aminoethanol	Safe Work Australia (Australia, 8/2005). STEL: 15 mg/m ³ 15 minute(s). STEL: 6 ppm 15 minute(s). TWA: 7.5 mg/m ³ 8 hour(s). TWA: 3 ppm 8 hour(s).
hexadecan-1-ol	TRGS900 AGW (Germany, 1/2012). TWA: 200 mg/m ³ 8 hour(s). TWA: 20 ppm 8 hour(s). PEAK: 200 mg/m ³ 15 minute(s). PEAK: 20 ppm 15 minute(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.

Exposure controls

- Engineering measures** : In case of insufficient ventilation, wear suitable respiratory equipment.
- Hygiene measures** : When using do not eat, drink or smoke.
- Eyes** : Safety glasses.
- Hands** : Wear suitable gloves.
- Respiratory** : In case of insufficient ventilation, wear suitable respiratory equipment.
- Skin** : Wear suitable protective clothing.
- 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.

9. Physical and chemical properties

Physical state	: Liquid. [Viscous liquid.]
Color	: Clear.
Odor	: Fragrant.
Boiling point	: >100°C (>212°F)
Relative density	: 1.06 to 1.07
Density	: 1.1 to 2.1 g/cm ³
Flash point	: Closed cup: Not applicable.
pH	: 8.4 to 9.3
Flame duration	: Not applicable.

10. Stability and reactivity

Chemical stability	: Stable under recommended storage and handling conditions (see section 7).
Possibility of hazardous reactions	: Not available.
Conditions to avoid	: No specific data.
Materials to avoid	: No specific data.
Hazardous decomposition products	: Ammonia. sulfur oxides

11. Toxicological information

Potential acute health effects

Inhalation	: Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Ingestion	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Eye contact	: No known significant effects or critical hazards.

Acute toxicity

Product/ingredient name	Result	Dose	Exposure
Propylene glycol	LD50 Dermal	20800 mg/kg	-
	LD50 Oral	20 g/kg	-
White mineral oil (petroleum)	LD50 Oral	>5000 mg/kg	-
octadecan-1-ol	LD50 Oral	>5000 mg/kg	-
2-aminoethanol	LD50 Oral	1720 mg/kg	-
hexadecan-1-ol	LD50 Oral	5 g/kg	-

Conclusion/Summary : Not available.

Potential chronic health effects

Chronic toxicity

Conclusion/Summary : Not available.

Irritation/Corrosion

Product/ingredient name	Result	Score	Exposure	Observation
Propylene glycol	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 Intermittent	-
	Skin - Mild irritant	-	96 hours 30 Percent	-
octadecan-1-ol	Eyes - Mild irritant	-	24 hours 100 milligrams	-

11. Toxicological information

2-aminoethanol	Skin - Mild irritant	-	24 hours 500 milligrams	-
	Skin - Mild irritant	-	48 hours 30 Percent	-
	Eyes - Severe irritant	-	250 Micrograms	-
	Skin - Moderate irritant	-	505 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 0.2 Percent	-
	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	-	

Conclusion/Summary : Not available.

Sensitizer

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Mutagenicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Chronic effects : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Inhalation : No specific data.

Ingestion : No specific data.

Skin : No specific data.

Eyes : No specific data.

Target organs : Contains material which may cause damage to the following organs: kidneys, the nervous system, liver, gastrointestinal tract, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea, testes.

12. Ecological information

THE FOLLOWING DATA IN THIS SECTION IS SOURCED FROM PUBLICLY AVAILABLE DATABASES AND NOT THE REPRESENTATION OF ANY DATA COLLECTED BY ZOTOS INTERNATIONAL OR ITS AFFILIATES.

Ecotoxicity : No known significant effects or critical hazards.

Aquatic ecotoxicity

12. Ecological information

Product/ingredient name	Result	Species	Exposure
Propylene glycol	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
2-aminoethanol	Acute EC50 80000 ug/L Fresh water	Algae - Isochrysis galbana	96 hours
	Acute LC50 >100000 ug/L Marine water	Crustaceans - Crangon crangon - Adult	48 hours
	Acute LC50 150 mg/L Fresh water	Fish - Oncorhynchus mykiss - Yolk-sac fry	96 hours

Conclusion/Summary : Not available.

Other ecological information

Persistence/degradability

Conclusion/Summary : Not available.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Propylene glycol	-0.92	-	low
White mineral oil (petroleum)	>6	-	high
octadecan-1-ol	8.22	-	high
2-aminoethanol	-1.31	-	low

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

13. Disposal considerations

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

14. Transport information

Regulation	UN number	Proper shipping name	Classes	PG*	Label	Additional information
ADG	Not regulated.	-	-	-		-
ADR	Not regulated.	-	-	-		-
IMDG	Not regulated.	-	-	-		-
IATA	Not regulated.	-	-	-		-

PG* : Packing group

15. Regulatory information

Standard for the Uniform Scheduling of Drugs and Poisons

Not regulated.

Control of Scheduled Carcinogenic Substances

Not available.

No listed substance

Australia inventory (AICS) : All ingredients that are not contained in the AICS database are below registration thresholds.

16. Other information

Date of issue : 7/25/2012.

Disclaimer

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.