Material Safety Data Sheet

Quantum Thermal Straightener Color-Treated Formula - Step 3 - Straightening Neutralizer

1. Identification of the material and supplier

Names

Product name : **Quantum Thermal Straightener Color-Treated Formula - Step 3 - Straightening Neutralizer**

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 : N; R51/53

Risk phrases : R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases : S29- Do not empty into drains.
S61- Avoid release to the environment. Refer to special instructions/safety data sheet.

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. Additional information on toxicological endpoints is available from the supplier upon request

3. Composition/information on ingredients

Mixture : Yes.

Ingredient name	CAS number	Concentration
hexadecan-1-ol	36653-82-4	3.50
octadecan-1-ol	112-92-5	3.00
hydrogen peroxide solution	7722-84-1	2.18
octadecan-1-ol	112-92-5	1.40
Propylene glycol	57-55-6	1.04

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 : Call physician immediately. Have conscious person drink several glasses of water or milk. Do not induce vomiting. Get medical attention.

Skin contact : Wash the contaminated skin gently and thoroughly with running water and non-abrasive soap.

Eye contact : Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Get medical attention if you feel unwell.

4. First aid measures

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 : None known.

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

Occupational exposure limits

Ingredient name	Exposure limits
hexadecan-1-ol	**TRGS900 AGW (Germany, 1/2012).** TWA: 200 mg/m³ 8 hour(s). TWA: 20 ppm 8 hour(s). PEAK: 200 mg/m³ 15 minute(s). PEAK: 20 ppm 15 minute(s).
octadecan-1-ol	**TRGS900 AGW (Germany, 1/2012).** TWA: 224 mg/m³ 8 hour(s). TWA: 20 ppm 8 hour(s). PEAK: 224 mg/m³ 15 minute(s). PEAK: 20 ppm 15 minute(s).
hydrogen peroxide solution	**Safe Work Australia (Australia, 8/2005).** TWA: 1.4 mg/m³ 8 hour(s). TWA: 1 ppm 8 hour(s).
octadecan-1-ol	**TRGS900 AGW (Germany, 1/2012).** TWA: 224 mg/m³ 8 hour(s). TWA: 20 ppm 8 hour(s). PEAK: 224 mg/m³ 15 minute(s). PEAK: 20 ppm 15 minute(s).
Propylene glycol	**Safe Work Australia (Australia, 8/2005).** TWA: 10 mg/m³ 8 hour(s). Form: Particulate TWA: 150 ppm 8 hour(s). Form: Vapor and particulates TWA: 474 mg/m³ 8 hour(s). Form: Vapor and particulates

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.

8. Exposure controls/personal protection

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.

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.

Respiratory : Chemical splash goggles. Protective clothing must be worn.

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.

9. Physical and chemical properties

Physical state : Liquid. [Viscous liquid.]

Color : Off-white.

Odor : Characteristic.

Boiling point : >100°C (>212°F)

Relative density : 1.004 to 1.01

Density : 1.1 to 2.1 g/cm^3

Flash point : Closed cup: Not applicable.

pH : 3 to 4

Solubility : Soluble in the following materials: cold water.

Flame duration : Not applicable.

10. Stability and reactivity

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Materials to avoid : No specific data.

Hazardous decomposition products : Contaminated product generates oxygen gas pressure build-up

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
hexadecan-1-ol	LD50 Oral	5 g/kg	-
octadecan-1-ol	LD50 Oral	>5000 mg/kg	-
hydrogen peroxide solution	LC50 Inhalation Vapor	2 g/m3	4 hours
	LD50 Dermal	3 g/kg	-
	LD50 Oral	376 mg/kg	-
octadecan-1-ol	LD50 Oral	>5000 mg/kg	-
Propylene glycol	LD50 Dermal	20800 mg/kg	-
	LD50 Oral	20 g/kg	-

Conclusion/Summary : Not available.

Potential chronic health effects

Chronic toxicity

Conclusion/Summary : Not available.

11. Toxicological information

Irritation/Corrosion

Product/ingredient name	Result	Score	Exposure	Observation
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 Intermittent	-
	Skin - Severe irritant	-	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	-
octadecan-1-ol	Eyes - Mild irritant	-	24 hours 100 milligrams	-
	Skin - Mild irritant	-	24 hours 500 milligrams	-
	Skin - Mild irritant	-	48 hours 30 Percent	-
hydrogen peroxide solution	Eyes - Severe irritant	-	1 milligrams	-
octadecan-1-ol	Eyes - Mild irritant	-	24 hours 100 milligrams	-
	Skin - Mild irritant	-	24 hours 500 milligrams	-
	Skin - Mild irritant	-	48 hours 30 Percent	-
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	-

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.

11. Toxicological information

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: blood, lungs, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.

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 : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
hydrogen peroxide solution	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
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

Conclusion/Summary : Not available.

Other ecological information

Persistence/degradability

Conclusion/Summary : Not available.

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
octadecan-1-ol	8.22	-	high
hydrogen peroxide solution	-1.36	-	low
octadecan-1-ol	8.22	-	high
Propylene glycol	-0.92	-	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.	-	-	-		-

14. Transport information

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.