

Material Safety Data Sheet



Quantum Hydra Balance Perm Hydrating alkaline Perm for Normal,
Resistant or Tinted Hair - Pre-Treatment

1. Identification of the material and supplier

Names

- Product name** : Quantum Hydra Balance Perm Hydrating alkaline Perm for Normal, Resistant or Tinted Hair - Pre-Treatment
- 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** : Xi; R36/38
R43
R52/53
- Risk phrases** : R36/38- Irritating to eyes and skin.
R43- May cause sensitization by skin contact.
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- Safety phrases** : S2- Keep out of the reach of children.
S24- Avoid contact with skin.
S37- Wear suitable gloves.
S46- If swallowed, seek medical advice immediately and show this container or label.
- Statement of hazardous/dangerous nature** : 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
2-methylpentane-2,4-diol	107-41-5	10
Propylene glycol	57-55-6	4
1-dodecyl-2-pyrrolidone	2687-96-9	1.75
Propylene glycol	57-55-6	1

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** : Move affected person to fresh air.
- Ingestion** : Have conscious person drink several glasses of water or milk. Do not induce vomiting. Get medical attention if adverse health effects persist or are severe.

4. First aid measures

- Skin contact** : Prolonged or repeated contact with skin or mucous membrane may result in irritation symptoms, such as redness, blistering, dermatitis etc. Discontinue use of product. Apply cold compresses to affected areas to relieve any discomfort. Seek medical attention if irritation persists.
- Eye contact** : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. May cause eye irritation.
- Protection of first-aiders** : Use suitable protective equipment (section 8).
- Advice to doctor** : Treat symptomatically.

5. Fire-fighting measures

- Extinguishing media** : Extinguish fire using an agent suitable for the surrounding fire. Dike liquid for later disposal.
- 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. This material is harmful to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- In a fire or if heated, a pressure increase will occur and the container may burst.
- 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** : Non-combustible. No special recommendations.

6. Accidental release measures

- Personal precautions** : Do not touch or walk through spilled material. Keep container closed.
- 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). Water polluting material.
- 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** : Keep container tightly closed. Store in a dry place.

8. Exposure controls/personal protection

Occupational exposure limits

Ingredient name	Exposure limits
2-methylpentane-2,4-diol	Safe Work Australia (Australia, 8/2005). PEAK: 25 ppm 15 minute(s). PEAK: 121 mg/m ³ 15 minute(s).
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
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

8. Exposure controls/personal protection

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	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
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	: Wear suitable gloves.
Respiratory	: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
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	: White. Off-white.
Odor	: Fragrance-like.
Boiling point	: >100°C (>212°F)
Relative density	: 0.99 to 1.1
Density	: 1.1 to 2.1 g/cm ³
Flash point	: Closed cup: Not applicable.
pH	: 3 to 4.5
Flame duration	: Not applicable.

10. Stability and reactivity

Chemical stability	: Stable under recommended storage and handling conditions (see section 7).
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	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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	: Irritating to mouth, throat and stomach.
Skin contact	: Irritating to skin. May cause sensitization by skin contact.
Eye contact	: Irritating to eyes.
Acute toxicity	

11. Toxicological information

Product/ingredient name	Result	Dose	Exposure
2-methylpentane-2,4-diol	LD50 Oral	3700 mg/kg	-
Propylene glycol	LD50 Dermal	20800 mg/kg	-
Propylene glycol	LD50 Oral	20 g/kg	-
Propylene glycol	LD50 Dermal	20800 mg/kg	-
Propylene glycol	LD50 Oral	20 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
2-methylpentane-2,4-diol	Skin - Mild irritant	-	465 milligrams	-
	Skin - Moderate irritant	-	24 hours 500 milligrams	-
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	-
1-dodecyl-2-pyrrolidone	Skin - Moderate irritant	-	72 hours 104 milligrams Intermittent	-
	Skin - Mild irritant	-	96 hours 30 Percent	-
	Eyes - Moderate irritant	-	100 milligrams	-
	Skin - Severe irritant	-	500 milligrams	-
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.

11. Toxicological information

Reproductive toxicity

- Conclusion/Summary** : Not available.
- Chronic effects** : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- 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** : Adverse symptoms may include the following:
irritation
redness
- Eyes** : Adverse symptoms may include the following:
irritation
watering
redness

- Target organs** : Contains material which may cause damage to the following organs: mucous membranes, 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** : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
2-methylpentane-2,4-diol	Acute EC50 2800000 ug/L Fresh water	Crustaceans - Ceriodaphnia reticulata - Larvae - <24 hours	48 hours
	Acute EC50 3200000 ug/L Fresh water	Daphnia - Daphnia magna - Larvae - <24 hours	48 hours
Propylene glycol	Acute LC50 8000000 ug/L Marine water	Fish - Alburnus alburnus - 8 cm	96 hours
	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
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

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12. Ecological information

2-methylpentane-2,4-diol	0.58	-	low
Propylene glycol	-0.92	-	low
1-dodecyl-2-pyrrolidone	4.2	-	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.	-	-	-		-
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.