

Material Safety Data Sheet



Design Freedom Plus Alkaline Perm For Normal & Tinted Hair - Waving Lotion

1. Product and company identification

Product name	: Design Freedom Plus Alkaline Perm For Normal & Tinted Hair - Waving Lotion
Manufacturer	: Zotos International, INC 100 Tokeneke Road, Darien, CT 06820 www.zotos.com
Validation date	: 9/12/2012.
In case of emergency	: (800) 584-8038 [24 Hours]
Telephone number	: (203) 656-7859 [8:30 a.m. - 5:00 p.m.]
Transportation Emergency	: Contact: CHEMTREC 1-800-424-9300 [US/Canada 24 Hours]
Product type	: Liquid.

2. Hazards identification

Emergency overview

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

Color	: Clear.
Odor	: Fragrant.
Hazard statements	: CAUSES EYE IRRITATION. MAY BE HARMFUL IF SWALLOWED. MAY CAUSE SKIN IRRITATION.
Precautionary measures	: Do not breathe vapor or mist. Do not ingest. Do not eat, drink or smoke when using this product. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.
OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Potential acute health effects

Inhalation	: MAY CAUSE RESPIRATORY TRACT IRRITATION.
Ingestion	: Mild irritant
Skin	: May cause sensitization by skin contact.
Eyes	: Prolonged or repeated contact with skin or mucous membrane may result in irritation symptoms, such as redness, blistering, dermatitis etc.

Potential chronic health effects

Chronic effects	: Contains material that may cause target organ damage, based on animal data.
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: pain or irritation watering redness

Medical conditions aggravated by over-exposure	: 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

United States

Name	CAS number	%
Monoethanolamine	141-43-5	2.83

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 contaminated skin with soap and water.
- 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.
- 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** : In a fire or if heated, a pressure increase will occur and the container may burst.
- 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
sulfur oxides
- 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

United States

Ingredient	Exposure limits
Monoethanolamine	<p>ACGIH TLV (United States, 2/2010). TWA: 3 ppm 8 hour(s). TWA: 7.5 mg/m³ 8 hour(s). STEL: 6 ppm 15 minute(s). STEL: 15 mg/m³ 15 minute(s).</p> <p>OSHA PEL 1989 (United States, 3/1989). TWA: 3 ppm 8 hour(s). TWA: 8 mg/m³ 8 hour(s). STEL: 6 ppm 15 minute(s). STEL: 15 mg/m³ 15 minute(s).</p> <p>NIOSH REL (United States, 6/2009). TWA: 3 ppm 10 hour(s). TWA: 8 mg/m³ 10 hour(s). STEL: 6 ppm 15 minute(s). STEL: 15 mg/m³ 15 minute(s).</p> <p>OSHA PEL (United States, 6/2010). TWA: 3 ppm 8 hour(s). TWA: 6 mg/m³ 8 hour(s).</p>

Canada

Occupational exposure limits

No exposure limit value known.

Mexico

Occupational exposure limits

No exposure limit value known.

Consult local authorities for acceptable exposure limits.

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 : In case of insufficient ventilation, wear suitable respiratory equipment.

Hands : Wear suitable gloves.

Eyes : Safety glasses.

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.

Other protection : Not available.

9. Physical and chemical properties

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

10. Stability and reactivity

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

11. Toxicological information

United States

Acute toxicity

Product/ingredient name	Result	Dose	Exposure
Monoethanolamine	LD50 Oral	1720 mg/kg	-

Conclusion/Summary : Not available.

Chronic toxicity

Conclusion/Summary : Not available.

Irritation/Corrosion

Product/ingredient name	Result	Score	Exposure	Observation
Monoethanolamine	Eyes - Severe irritant	-	250 Micrograms	-
	Skin - Moderate irritant	-	505 milligrams	-

Conclusion/Summary : Not available.

Sensitizer

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : No carcinogenic effect.

Mutagenicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Canada

Acute toxicity

Conclusion/Summary : Not available.

Chronic toxicity

Conclusion/Summary : Not available.

Irritation/Corrosion

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.

Mexico

Acute toxicity

Conclusion/Summary : Not available.

Chronic toxicity

Conclusion/Summary : Not available.

Irritation/Corrosion

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.

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.

United States

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
Monoethanolamine	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.

Persistence/degradability

Conclusion/Summary : Not available.

Canada

Aquatic ecotoxicity

Conclusion/Summary : Not available.

Persistence/degradability

Conclusion/Summary : Not available.

Mexico

Aquatic ecotoxicity

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.

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.

14. Transport information

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

United States

- HCS Classification** : Irritating material
Target organ effects
- U.S. Federal regulations** : TSCA : Exempt
- SARA 302/304/311/312 extremely hazardous substances**: No products were found.
- SARA 302/304 emergency planning and notification**: No products were found.
- SARA 302/304/311/312 hazardous chemicals**: Monoethanolamine
- SARA 311/312 MSDS distribution - chemical inventory - hazard identification**:
Monoethanolamine: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard
- 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

15. Regulatory information

State regulations

- Massachusetts** : The following components are listed: ETHANOLAMINE
- New York** : None of the components are listed.
- New Jersey** : The following components are listed: ETHANOLAMINE; ETHANOL, 2-AMINO-
- Pennsylvania** : The following components are listed: ETHANOL, 2-AMINO-
- 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

Canadian lists

- Canada inventory** : Not determined.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Mexico

- Classification** :



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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The customer is responsible for determining the PPE code for this material.

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



16. Other information

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