

Material Safety Data Sheet



Image Maker Thermal Control Exothermic Perm - Neutralizer

1. Product and company identification

Product name	: Image Maker Thermal Control Exothermic Perm - Neutralizer
Manufacturer	: Zotos International, INC. 100 Tokeneke Road, Darien, CT 06820 www.zotos.com
Validation date	: 7/26/2012.
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. Additional information on toxicological endpoints is available from the supplier upon request

Color	: Off-white.
Odor	: Characteristic.
Hazard statements	: CAUSES EYE IRRITATION.
Precautionary measures	: Do not breathe vapor or mist. Do not eat, drink or smoke when using this product. Avoid contact with eyes. Wash thoroughly after handling.
OSHA/HCS status	: None.
Potential acute health effects	
Inhalation	: None known.
Ingestion	: Mild irritant
Skin	: Prolonged exposure may result in skin burns and ulcerations.
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	: None identified.
Medical conditions aggravated by over-exposure	: None.

See toxicological information (Section 11)

3. Composition/information on ingredients

Name	CAS number	%
hydrogen peroxide	7722-84-1	2.1801

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** : Treat symptomatically.

5. Fire-fighting measures

- Flammability of the product** : None. 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** : No specific data.
- 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** : 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	<p>ACGIH TLV (United States, 2/2010). TWA: 1 ppm 8 hour(s). TWA: 1.4 mg/m³ 8 hour(s).</p> <p>OSHA PEL 1989 (United States, 3/1989). TWA: 1 ppm 8 hour(s). TWA: 1.4 mg/m³ 8 hour(s).</p> <p>NIOSH REL (United States, 6/2009). TWA: 1 ppm 10 hour(s). TWA: 1.4 mg/m³ 10 hour(s).</p> <p>OSHA PEL (United States, 6/2010). TWA: 1 ppm 8 hour(s). TWA: 1.4 mg/m³ 8 hour(s).</p>

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. Chemical splash goggles. Protective clothing must be worn.
Hands	: None.
Eyes	: None.
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	: 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	: Not available.
Conditions to avoid	: Not available.
Incompatible materials	: Reducing agents metals
Hazardous decomposition products	: Contaminated product generates oxygen gas pressure build-up
Possibility of hazardous reactions	: Not available.
Hazardous polymerization	: Not available. Will not occur.

11. Toxicological information

Acute toxicity

Conclusion/Summary : Not available.

Chronic toxicity

Conclusion/Summary : Not available.

Irritation/Corrosion

Product/ingredient name	Result	Score	Exposure	Observation
hydrogen peroxide	Eyes - Severe irritant	-	1 milligrams	-

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

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.

13. Disposal considerations

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

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: Hydrogen Peroxide, aqueous solution

SARA 311/312 MSDS distribution - chemical inventory - hazard identification:
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

15. Regulatory information

Pennsylvania : The following components are listed: HYDROGEN PEROXIDE (CONC > 52 PERCENT)

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 : All components are listed or exempted.

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.) :



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Notice to reader

16. Other information

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.