

Material Safety Data Sheet

JOICO LUMISHINE DEMI-PERMANENT LIQUID COLOR all shades



1. Product and company identification

Product name	: JOICO LUMISHINE DEMI-PERMANENT LIQUID COLOR all shades
Manufacturer	: Zotos International, INC 100 Tokeneke Road, Darien, CT 06820 www.zotos.com
Validation date	: 5/6/2015.
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

Odor : Ammoniacal.

Hazard statements : COMBUSTIBLE. CAUSES EYE IRRITATION. MAY BE HARMFUL IF SWALLOWED. MAY CAUSE SKIN IRRITATION.

Precautionary measures : Do not ingest. Use only with adequate ventilation. Avoid contact with eyes, skin and clothing. Keep away from heat, sparks and flame. Keep container tightly closed. 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 : Irritating to eyes, mucosa and skin and may cause burns. Acute: Material is irritating to mucous membranes and upper respiratory tract. Chronic Effects Include: Sensitized persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the OEL.

Ingestion : non-toxic.

Skin : Chronic Effects Include: Causes skin irritation. May cause skin sensitization.

Eyes : CAUTION Causes eye irritation.

Potential chronic health effects

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 : Adverse symptoms may include the following:
irritation
redness

2. Hazards identification

- Eyes** : Adverse symptoms may include the following:
 pain or irritation
 watering
 redness
- Medical conditions aggravated by over-exposure** : The mixture may be a skin sensitizer. It may also be a skin irritant and repeated contact may increase this effect.
- See toxicological information (Section 11)

3. Composition/information on ingredients

Canada

Name	CAS number	%
propane-1,2-diol	57-55-6	9.90
Isopropyl alcohol	67-63-0	5.00
Alcohols, C12-15, ethoxylated	68131-39-5	3.50
3-aminophenol	591-27-5	0.36
p-phenylenediamine	106-50-3	0.22

Mexico

Name	CAS number	UN number	%	IDLH	Classification			
					H	F	R	Special
Isopropyl alcohol	67-63-0	UN1993	5.00	2000 ppm	2	3	0	-
Alcohols, C12-15, ethoxylated	68131-39-5	UN3082	3.50	-	1	0	0	-
propane-1,2-diol	57-55-6	Not available.	9.90	-	2	1	0	-

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** : Flush with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention immediately.
- Skin contact** : Wash the contaminated skin gently and thoroughly with running water and non-abrasive soap. If on clothes, remove clothes. Get medical attention if adverse health effects persist or are severe.
- Inhalation** : If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Ensure sufficient ventilation during and after use, in order to prevent vapour accumulation. Seek immediate medical attention.
- Ingestion** : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
- 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** : Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.
- 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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special fire-fighting procedures** : Immediately contact emergency personnel. In case of insufficient ventilation, wear suitable respiratory equipment. In a fire, hazardous decomposition products may be produced. Thermal degradation may produce oxides of carbon and/or nitrogen hydrocarbons and/or derivatives
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
halogenated compounds
- 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** : Wear suitable protective clothing, gloves and eye/face protection. Avoid contact with eyes, skin and clothing.
- 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** : Wash with plenty of soap and water. 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** : Store in a cool, dry, well-ventilated place. Avoid contamination by any source including metals, dust and organic materials. Keep packages tightly closed. Store in a dry, well-ventilated place.

8. Exposure controls/personal protection

Canada

<u>Occupational exposure limits</u>		TWA (8 hours)			STEL (15 mins)			Ceiling			Notations
Ingredient	List name	ppm	mg/m ³	Other	ppm	mg/m ³	Other	ppm	mg/m ³	Other	
Isopropyl alcohol	US ACGIH 4/2014	200	-	-	400	-	-	-	-	-	
	AB 4/2009	200	492	-	400	984	-	-	-	-	
	BC 4/2014	200	-	-	400	-	-	-	-	-	
	ON 1/2013	200	-	-	400	-	-	-	-	-	
	QC 1/2014	400	983	-	500	1230	-	-	-	-	
propane-1,2-diol	ON 1/2013	-	10	-	-	-	-	-	-	-	[a]
	ON 1/2013	50	155	-	-	-	-	-	-	-	[b]
p-phenylenediamine	US AIHA 10/2011	-	10	-	-	-	-	-	-	-	
	US ACGIH 4/2014	-	0.1	-	-	-	-	-	-	-	
	AB 4/2009	-	0.1	-	-	-	-	-	-	-	
	BC 4/2014	-	0.1	-	-	-	-	-	-	-	[3]
	ON 1/2013	-	0.1	-	-	-	-	-	-	-	
	QC 1/2014	-	0.1	-	-	-	-	-	-	-	[1][3]

[1]Absorbed through skin. [3]Skin sensitization

Form: [a]Aerosol only. [b]Vapour and aerosol.

8. Exposure controls/personal protection

Mexico

Occupational exposure limits

Ingredient	Exposure limits
Isopropyl alcohol	NOM-010-STPS (Mexico, 9/2000). LMPE-PPT: 400 ppm 8 hours. LMPE-PPT: 980 mg/m ³ 8 hours. LMPE-CT: 1225 mg/m ³ 15 minutes. LMPE-CT: 500 ppm 15 minutes.

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. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Engineering measures : In case of insufficient ventilation, wear suitable respiratory equipment. No special ventilation requirements.

Hygiene measures : When using do not eat, drink or smoke. Avoid contact with eyes, skin and clothing.

Personal protection

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

Hands : Wear suitable gloves.

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.

Flash point : Closed cup: 49°C (120.2°F)

Odor : Ammoniacal.

pH : 9.5 to 10.8

Relative density : 0.985 to 1.05

10. Stability and reactivity

Chemical stability : Stable under recommended storage and handling conditions (see Section 7).

Conditions to avoid : Avoid contact with ignition and heat sources. Keep away from direct sunlight.

Incompatible materials : metals strong acids

Hazardous decomposition products : Ammonia.

Possibility of hazardous reactions : Not available.

11. Toxicological information

Canada

Acute toxicity

Product/ingredient name	Result	Dose	Exposure
Isopropyl alcohol	LD50 Dermal	12800 mg/kg	-
	LD50 Oral	5000 mg/kg	-
Alcohols, C12-15, ethoxylated	LD50 Oral	2 g/kg	-
propane-1,2-diol	LD50 Dermal	20800 mg/kg	-
	LD50 Oral	20 g/kg	-
3-aminophenol	LD50 Oral	924 mg/kg	-
p-phenylenediamine	LC50 Inhalation Dusts and mists	920 mg/m ³	4 hours
	LD50 Oral	80 mg/kg	-

Conclusion/Summary : Not available.

Chronic toxicity

Conclusion/Summary : Not available.

Irritation/Corrosion

Product/ingredient name	Result	Score	Exposure	Observation
Isopropyl alcohol	Eyes - Moderate irritant	-	24 hours 100 milligrams	-
	Eyes - Moderate irritant	-	10 milligrams	-
	Eyes - Severe irritant	-	100 milligrams	-
propane-1,2-diol	Skin - Mild irritant	-	500 milligrams	-
	Eyes - Mild irritant	-	24 hours 500 milligrams	-
	Eyes - Mild irritant	-	100 milligrams	-
3-aminophenol	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	-
p-phenylenediamine	Eyes - Moderate irritant	-	24 hours 100 milligrams	-
	Skin - Mild irritant	-	24 hours 12500 Micrograms	-
p-phenylenediamine	Skin - Mild irritant	-	24 hours 250 milligrams	-
	Skin - Mild irritant	-	24 hours 250 milligrams	-
	Skin - Mild irritant	-	24 hours 250 milligrams	-
	Skin - Mild irritant	-	24 hours 250 milligrams	-
	Skin - Mild irritant	-	24 hours 250 milligrams	-
	Skin - Mild irritant	-	24 hours	-

11. Toxicological information

	Skin - Moderate irritant	-	12500 Micrograms 24 hours 250 milligrams	-
	Skin - Moderate irritant	-	1 Percent	-

Conclusion/Summary : Not available.

Sensitizer

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Isopropyl alcohol	A4	3	-	-	-	-

Mutagenicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Mexico

Acute toxicity

Product/ingredient name	Result	Dose	Exposure
Isopropyl alcohol	LD50 Dermal	12800 mg/kg	-
	LD50 Oral	5000 mg/kg	-
Alcohols, C12-15, ethoxylated	LD50 Oral	2 g/kg	-
propane-1,2-diol	LD50 Dermal	20800 mg/kg	-
	LD50 Oral	20 g/kg	-

Conclusion/Summary : Not available.

Chronic toxicity

Conclusion/Summary : Not available.

Irritation/Corrosion

Product/ingredient name	Result	Score	Exposure	Observation
Isopropyl alcohol	Eyes - Moderate irritant	-	24 hours 100 milligrams	-
	Eyes - Moderate irritant	-	10 milligrams	-
	Eyes - Severe irritant	-	100 milligrams	-
propane-1,2-diol	Skin - Mild irritant	-	500 milligrams	-
	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	-

11. Toxicological information

	Skin - Mild irritant	-	milligrams Intermittent 96 hours 30 Percent	-
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Conclusion/Summary : Not available.

Sensitizer

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Isopropyl alcohol	A4	3	-	-	-	-

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.

Canada

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
Isopropyl alcohol	Acute LC50 1400000 µg/l Marine water	Crustaceans - Crangon crangon	48 hours
	Acute LC50 4200 mg/l Fresh water	Fish - Rasbora heteromorpha	96 hours
Alcohols, C12-15, ethoxylated	Acute EC50 0.7 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 0.39 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute EC50 302 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 1400 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic NOEC 1 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Chronic NOEC 83 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	21 days
propane-1,2-diol	Acute EC50 >110 ppm Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 1020000 µg/l Fresh water	Crustaceans - Ceriodaphnia dubia	48 hours
3-aminophenol	Acute LC50 710000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute EC50 1100 µg/l Fresh water	Daphnia - Daphnia magna	48 hours

Conclusion/Summary : Not available.

Persistence/degradability

Conclusion/Summary : Not available.

Mexico

Aquatic ecotoxicity

12. Ecological information

Product/ingredient name	Result	Species	Exposure
Isopropyl alcohol Alcohols, C12-15, ethoxylated	Acute LC50 1400000 µg/l Marine water	Crustaceans - Crangon crangon	48 hours
	Acute LC50 4200 mg/l Fresh water	Fish - Rasbora heteromorpha	96 hours
	Acute EC50 0.7 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 0.39 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute EC50 302 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 1400 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic NOEC 1 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
propane-1,2-diol	Chronic NOEC 83 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	21 days
	Acute EC50 >110 ppm Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 1020000 µg/l Fresh water	Crustaceans - Ceriodaphnia dubia	48 hours
	Acute LC50 710000 µg/l Fresh water	Fish - Pimephales promelas	96 hours

Conclusion/Summary : Not available.

Persistence/degradability

Conclusion/Summary : Not available.


13. Disposal considerations

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


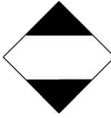


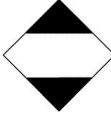



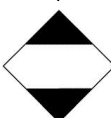


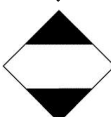
Disposal should be in accordance with applicable regional, national and local laws and regulations.

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	1993	Flammable liquids, n.o.s.	3	III		<p>Limited quantity Yes.</p> <p>Packaging instruction Passenger aircraft Quantity limitation: 60 L</p> <p>Cargo aircraft Quantity limitation: 220 L</p> <p>Special provisions B1, B52, IB3, T4, TP1, TP29</p>

14. Transport information

TDG Classification	UN1993	FLAMMABLE LIQUIDS, N.O. S.	3	III	  	<p>Explosive Limit and Limited Quantity Index 5</p> <p>Passenger Carrying Road or Rail Index 60</p> <p>Special provisions 16</p>
Mexico Classification	UN1993	LIQUIDO INFLAMABLE, N. E.P.	3	III	  	<p>Special provisions 223, 274</p>
ADR/RID Class	UN1993	FLAMMABLE LIQUIDS, N.O. S.	3	III	  	<p>The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.</p> <p>Hazard identification number 30</p> <p>Limited quantity LQ7</p> <p>Special provisions 274 601 640E</p> <p>Tunnel code (D/E)</p>
IMDG Class	UN1993	FLAMMABLE LIQUIDS, N.O. S.. Marine pollutant (Alcohols, C12-15, ethoxylated, cetrimonium chloride)	3	III	  	<p>The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.</p> <p>Emergency schedules (EmS) F-E, _S-E_</p> <p>Special provisions 223, 274, 955</p>

14. Transport information

IATA-DGR Class	UN1993	FLAMMABLE LIQUIDS, N.O. S.	3	III	 	<p>The environmentally hazardous substance mark may appear if required by other transportation regulations.</p> <p><u>Passenger and Cargo Aircraft</u> Quantity limitation: 60 L Packaging instructions: 309</p> <p><u>Cargo Aircraft Only</u> Quantity limitation: 220 L Packaging instructions: 310</p> <p><u>Limited Quantities - Passenger Aircraft</u> Quantity limitation: 10 L Packaging instructions: Y309</p> <p><u>Special provisions</u> A3</p>
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PG* : Packing group

15. Regulatory information

Canada

WHMIS (Canada) : Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F).
 Class D-2B: Material causing other toxic effects (Toxic).

Canadian lists

Canadian NPRI : The following components are listed: Isopropyl alcohol

CEPA Toxic substances : None of the components are listed.

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

15. Regulatory information

Chemical Weapons Convention List Schedule III Chemicals : Not listed

16. Other information

Date of printing : 5/6/2015.
Date of issue : 5/6/2015.
Date of previous issue : No previous validation.
Version : 0.01
Prepared by : Regulatory Affairs Group

 Indicates information that has changed from previously issued version.

Notice to reader

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.