Material Safety Data Sheet

VERO K-PAK CHROME DEMI-PERMANENT CREME COLOR CLEAR GLOSS

1. Product and company identification

Product name : VERO K-PAK CHROME DEMI-PERMANENT CREME COLOR CLEAR GLOSS

Manufacturer : Zotos International, INC
100 Tokeneke Road,
Darien, CT 06820
www.zotos.com

Validation date : 2/23/2015.

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

Color : Off-white.

Odor : Ammoniacal.

Hazard statements : FLAMMABLE LIQUID AND VAPOR. COMBUSTIBLE. CAUSES EYE AND SKIN IRRITATION.

Precautionary measures : 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	4.50
Isopropyl alcohol	67-63-0	3.00
hexadecan-1-ol	36653-82-4	2.50
Octadecan-1-ol, ethoxylated	9005-00-9	1.75
Acetic acid, chloro-, sodium salt, reaction products with 4,5-dihydro-1H-imidazole-1-ethanol 2-norcoco alkyl derivs. and sodium hydroxide	68608-65-1	1.04
White mineral oil (petroleum)	8042-47-5	1.00

Mexico

					Classification			
Name	CAS number	UN number	%	IDLH	H	F	R	Special
Isopropyl alcohol	67-63-0	UN1993	3.00	2000 ppm	2	3	0	-
propane-1,2-diol	57-55-6	Not available.	4.50	-	2	1	0	-
Octadecan-1-ol, ethoxylated	9005-00-9	Not available.	1.75	-	2	0	0	-
hexadecan-1-ol	36653-82-4	Not available.	2.50	-	2	0	0	-
Acetic acid, chloro-, sodium salt, reaction products with 4,5-dihydro-1H-imidazole-1-ethanol 2-norcoco alkyl derivs. and sodium hydroxide	68608-65-1	Not available.	1.04	-	2	0	0	-
White mineral oil (petroleum)	8042-47-5	Not available.	1.00	2500 mg/m³	0	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.

4. First aid measures

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
metal oxide/oxides

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

8. Exposure controls/personal protection

Occupational exposure limits		TWA (8 hours)			STEL (15 mins)			Ceiling			
Ingredient	**List name**	**ppm**	**mg/m³**	**Other**	**ppm**	**mg/m³**	**Other**	**ppm**	**mg/m³**	**Other**	**Notations**
Isopropyl alcohol	US ACGIH 6/2013	200	-	-	400	-	-	-	-	-	
	AB 4/2009	200	492	-	400	984	-	-	-	-	
	BC 7/2013	200	-	-	400	-	-	-	-	-	
	ON 1/2013	200	-	-	400	-	-	-	-	-	
	QC 12/2012	400	983	-	500	1230	-	-	-	-	
propane-1,2-diol	ON 1/2013	-	10	-	-	-	-	-	-	-	[a]
	ON 1/2013	50	155	-	-	-	-	-	-	-	[b]
	US AIHA 10/2011	-	10	-	-	-	-	-	-	-	
White mineral oil (petroleum)	US ACGIH 6/2013	-	5	-	-	-	-	-	-	-	[c]
	AB 4/2009	-	5	-	-	10	-	-	-	-	[d]
	BC 7/2013	-	1	-	-	-	-	-	-	-	
	ON 1/2013	-	5	-	-	10	-	-	-	-	[e]
	QC 12/2012	-	5	-	-	10	-	-	-	-	[e]

Form: [a]Aerosol only. [b]Vapour and aerosol. [c]Inhalable fraction [d]Mist [e]mist

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/m³ 8 hours. LMPE-CT: 1225 mg/m³ 15 minutes. LMPE-CT: 500 ppm 15 minutes.
White mineral oil (petroleum)	**NOM-010-STPS (Mexico, 9/2000).** LMPE-PPT: 5 mg/m³ 8 hours. Form: mist LMPE-CT: 10 mg/m³ 15 minutes. Form: mist

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: 51.1°C (124°F)

Color : Off-white.

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	-
propane-1,2-diol	LD50 Dermal	20800 mg/kg	-
	LD50 Oral	20 g/kg	-
hexadecan-1-ol	LD50 Oral	5 g/kg	-
White mineral oil (petroleum)	LD50 Oral	>5000 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	-
	Skin - Mild irritant	-	500 milligrams	-
propane-1,2-diol	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	-

11. Toxicological information

	Skin - Mild irritant	-	96 hours 30 Percent	-
Octadecan-1-ol, ethoxylated	Skin - Moderate irritant	-	48 hours 20 Percent	-
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	-
Acetic acid, chloro-, sodium salt, reaction products with 4,5-dihydro-1H-imidazole-1-ethanol 2-norcoco alkyl derivs. and sodium hydroxide	Skin - Severe irritant	-	24 hours 500 microliters	-

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	-	-	-	-
White mineral oil (petroleum)	A4	-	-	-	-	-

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	-
propane-1,2-diol	LD50 Dermal	20800 mg/kg	-
	LD50 Oral	20 g/kg	-
hexadecan-1-ol	LD50 Oral	5 g/kg	-
White mineral oil (petroleum)	LD50 Oral	>5000 mg/kg	-

Conclusion/Summary : Not available.

Chronic toxicity

11. Toxicological information

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	-
	Skin - Mild irritant	-	500 milligrams	-
propane-1,2-diol	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	-
Octadecan-1-ol, ethoxylated	Skin - Moderate irritant	-	48 hours 20 Percent	-
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	-
Acetic acid, chloro-, sodium salt, reaction products with 4,5-dihydro-1H-imidazole-1-ethanol 2-norcoco alkyl derivs. and sodium hydroxide	Skin - Severe irritant	-	24 hours 500 microliters	-

Conclusion/Summary : Not available.

Sensitizer

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Classification

11. Toxicological information

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Isopropyl alcohol	A4	3	-	-	-	-
White mineral oil (petroleum)	A4	-	-	-	-	-

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 1400000 µg/l	Fish - Gambusia affinis	96 hours
propane-1,2-diol	Acute EC50 110 ppm Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 1000 mg/l Marine water	Crustaceans - Chaetogammarus marinus - Young	48 hours
	Acute LC50 710000 µg/l Fresh water	Fish - Pimephales promelas	96 hours

Conclusion/Summary : Not available.

Persistence/degradability

Conclusion/Summary : Not available.

Mexico

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
Isopropyl alcohol	Acute LC50 1400000 µg/l Marine water	Crustaceans - Crangon crangon	48 hours
	Acute LC50 1400000 µg/l	Fish - Gambusia affinis	96 hours
propane-1,2-diol	Acute EC50 110 ppm Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 1000 mg/l Marine water	Crustaceans - Chaetogammarus marinus - Young	48 hours
	Acute LC50 710000 µg/l Fresh water	Fish - Pimephales promelas	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.

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		**Limited quantity** Yes. **Packaging instruction** **Passenger aircraft** Quantity limitation: 60 L **Cargo aircraft** Quantity limitation: 220 L **Special provisions** B1, B52, IB3, T4, TP1, TP29
TDG Classification	UN1993	FLAMMABLE LIQUIDS, N.O.S.	3	III		**Explosive Limit and Limited Quantity Index** 5 **Passenger Carrying Road or Rail Index** 60 **Special provisions** 16
Mexico Classification	UN1993	LIQUIDO INFLAMABLE, N.E.P.	3	III		**Special provisions** 223, 274
ADR/RID Class	UN1993	FLAMMABLE LIQUIDS, N.O.S.	3	III		**Hazard identification number** 30 **Limited quantity** LQ7 **Special provisions** 274 601 640E **Tunnel code** (D/E)

14. Transport information

IMDG Class	UN1993	FLAMMABLE LIQUIDS, N.O.S.	3	III		**Emergency schedules (EmS)** F-E, _S-E_ **Special provisions** 223, 274, 955
IATA-DGR Class	UN1993	FLAMMABLE LIQUIDS, N.O.S.	3	III		**Passenger and Cargo Aircraft** Quantity limitation: 60 L Packaging instructions: 309 **Cargo Aircraft Only** Quantity limitation: 220 L Packaging instructions: 310 **Limited Quantities - Passenger Aircraft** Quantity limitation: 10 L Packaging instructions: Y309 **Special provisions** A3

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; White mineral oil

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

15. Regulatory information

Chemical Weapons Convention List Schedule II Chemicals : Not listed

Chemical Weapons Convention List Schedule III Chemicals : Not listed

16. Other information

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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.