pH Chemicals Multi-Purpose Cleaner UVA



SECTION 1: IDENTIFICATION

1.1 GHS Product identifier: pH Chemicals Multi-Purpose Cleaner UVA

Other means of identification:

Non-applicable

1.2 Recommended use of the chemical and restrictions on use:

Relevant uses: Multiuse cleaner

Uses advised against: All uses not specified in this section or in section 7.3

1.3 Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party:

OLEIN REFINERY CORP
Carr. 3 Km. 90.4 BO Aguacate
00767 Yabucoa - PR
Phone: 7872662103
lab@oleincorp.com

1.4 Emergency phone number:

SECTION 2: HAZARD(S) IDENTIFICATION

2.1 Classification of the substance or mixture:

29 CFR 1910.1200:

Classification of this product has been carried out in accordance with paragraph (d) of § 1910.1200.

Eye Dam. 1: Serious eye damage, Category 1, H318
Skin Sens. 1: Sensitisation, skin, Category 1, H317

2.2 Label elements:

29 CFR 1910.1200:

Danger



Hazard statements:

Eye Dam. 1: H318 - Causes serious eye damage.
Skin Sens. 1: H317 - May cause an allergic skin reaction.

Precautionary statements:

P101: If medical advice is needed, have product container or label at hand.
P102: Keep out of reach of children.
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P280: Wear protective gloves/protective clothing/eye protection.
P302+P352: IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310: Immediately call a poison center/doctor.
P501: Dispose of the contents/containers according to the local, state and federal regulations.

Substances that contribute to the classification

Alcohols, (C9-C11)-branched, ethoxylated; Amines, coco alkyldimethyl, N-oxides; Dodecyldimethylamine oxide; (r)-p-mentha-1,8-diene

Additional labeling:

Keep out of the reach of children

2.3 Hazards not otherwise classified (HNOC):

Non-applicable

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances:

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

Non-applicable

3.2 Mixtures:

Chemical description: Aqueous mixture composed of complexing agent, preservatives, solvents, perfume, polymers and tensoactives

Components:

Remaining components are non-hazardous and/or present at amounts below reportable limits. The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.Therefore, in accordance with Appendix D to § 1910.1200, the product contains:

Identification	Chemical name/Classification	Concentration
CAS: 7732-18-5	**Water**	**75 - <100 %**
CAS: 169107-21-5	**Alcohols, (C9-C11)-branched, ethoxylated** Acute Tox. 4: H302; Eye Dam. 1: H318 - Danger	**<10 %**
CAS: 61788-90-7	**Amines, coco alkyldimethyl, N-oxides** Eye Dam. 1: H318; Skin Irrit. 2: H315 - Danger	**<10 %**
CAS: 1643-20-5	**Dodecyldimethylamine oxide** Acute Tox. 4: H302; Eye Dam. 1: H318; Skin Irrit. 2: H315 - Danger	**<10 %**
CAS: 5989-27-5	**(r)-p-mentha-1,8-diene** Asp. Tox. 1: H304; Flam. Liq. 3: H226; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Danger	**<10 %**
CAS: 123-92-2	**Isopentyl acetate** Flam. Liq. 3: H226 - Warning	**<10 %**
CAS: 624-41-9	**Isopentyl acetate** Flam. Liq. 3: H226 - Warning	**<10 %**
CAS: 121-32-4	**3-ethoxy-4-hydroxybenzaldehyde** Eye Irrit. 2A: H319 - Warning	**<10 %**
CAS: 123-35-3	**7-methyl-3-methyleneocta-1,6-diene** Asp. Tox. 1: H304; Carc. 2: H351; Eye Irrit. 2A: H319; Flam. Liq. 3: H226; Skin Irrit. 2: H315 - Danger	**<10 %**
CAS: 119-36-8	**Methyl salicylate** Acute Tox. 4: H302; Eye Dam. 1: H318 - Danger	**<10 %**
CAS: 77-92-9	**Citric Acid** Eye Irrit. 2A: H319 - Warning	**<10 %**
CAS: 5392-40-5	**Citral** Flam. Liq. 4: H227; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Warning	**<10 %**
CAS: 80-56-8	**Pin-2(3)-ene** Acute Tox. 4: H302; Asp. Tox. 1: H304; Flam. Liq. 3: H226; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Danger	**<10 %**

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

SECTION 4: FIRST-AID MEASURES

4.1 Description of necessary measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation:

This product does not contain substances classified as hazardous for inhalation, however, in case of symptoms of intoxication remove the person affected from the exposure area and provide with fresh air. Seek medical attention if the symptoms get worse or persist.

By skin contact:

May cause an allergic skin reaction. In case of contact it is recommended to clean the affected area thoroughly with water and neutral soap. In case of modifications on the skin (stinging, redness, rashes, blisters,...), seek medical advice with this Safety data Sheet

By eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, as this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

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SECTION 4: FIRST-AID MEASURES (continued)

By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

4.2 Most important symptoms/effects, acute and delayed:

Acute and delayed effects are indicated in sections 2 and 11.

4.3 Indication of immediate medical attention and special treatment needed, if necessary:

Non-applicable

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Suitable (and unsuitable) extinguishing media:

Suitable extinguishing media:

Product is non-flammable under normal conditions of storage, manipulation and use, but the product contains flammable substances. In the case of inflammation as a result of improper manipulation, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems.

Unsuitable extinguishing media:

IT IS RECOMMENDED NOT to use full jet water as an extinguishing agent.

5.2 Specific hazards arising from the chemical:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Special protective equipment and precautions for fire-fighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and individual respiratory equipment. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...)

Additional provisions:

As in any fire, prevent human exposure to fire, smoke, fumes or products of combustion. Only properly trained personnel should be involved in firefighting. Evacuate nonessential personnel from the fire area. Destroy any source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflammation. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel:

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inertization agent. Destroy any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

For emergency responders:

See section 8.

6.2 Environmental precautions:

This product is not classified as hazardous to the environment. Keep product away from drains, surface and underground water.

6.3 Methods and materials for containment and cleaning up:

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

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SECTION 7: HANDLING AND STORAGE (continued)

7.1 Precautions for safe handling:

A.- Precautions for safe manipulation

Comply with the current standards 29 CFR 1910 Occupational Safety and Health Standards. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Avoid the evaporation of the product as it contains flammable substances, which could form flammable vapour/air mixtures in the presence of sources of ignition. Control sources of ignition (mobile phones, sparks,...) and transfer at slow speeds to avoid the creation of electrostatic charges. Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations to prevent ergonomic and toxicological risks

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Minimum Temp.: 41 ºF

Maximum Temp.: 86 ºF

Maximum time: 12 Months

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace:

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000):

Identification	Occupational exposure limits		
Isopentyl acetate	8-hour TWA PEL	100 ppm	525 mg/m³
CAS: 123-92-2	Ceiling Values - TWA PEL		

US. ACGIH Threshold Limit Values:

Identification	Occupational exposure limits		
Isopentyl acetate	TLV-TWA	50 ppm	
CAS: 123-92-2	TLV-STEL	100 ppm	
Isopentyl acetate	TLV-TWA	50 ppm	
CAS: 624-41-9	TLV-STEL	100 ppm	

CALIFORNIA- TABLE AC-1 PERMISSIBLE EXPOSURE LIMITS FOR CHEMICAL CONTAMINANTS:

Identification	Occupational exposure limits		
Isopentyl acetate	PEL	50 ppm	266 mg/m³
CAS: 123-92-2	STEL	100 ppm	532 mg/m³
Isopentyl acetate	PEL	50 ppm	266 mg/m³
CAS: 624-41-9	STEL	100 ppm	532 mg/m³

8.2 Appropriate engineering controls:

A.- Individual protection measures, such as personal protective equipment

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

As a preventative measure it is recommended to use basic Personal Protection Equipment. For more information on Personal Protection Equipment (storage, use, cleaning, maintenance, class of protection,…) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1. All information contained herein is a recommendation, the information on clothing performance must be combined with professional judgment, and a clear understanding of the clothing application, to provide the best protection to the worker. All chemical protective clothing use must be based on a hazard assessment to determine the risks for exposure to chemicals and other hazards. Conduct hazard assessments in accordance with 29 CFR 1910.132.

B.- Respiratory protection

The use of protection equipment will be necessary if a mist forms or if the occupational exposure limits are exceeded.

C.- Specific protection for the hands

Pictogram	PPE	Remarks
 Mandatory hand protection	Protective gloves against minor risks	Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional /industrial users, we recommend using chemical protection gloves. Use gloves in accordance with manufacturer´s use limitations and OSHA standard 1910.138 (29CFR)

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.

D.- Ocular and facial protection

Pictogram	PPE	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.	Clean daily and disinfect periodically according to the manufacturer´s instructions. Use if there is a risk of splashing. Use this PPE in accordance with manufacturer´s use limitations and OSHA standard 1910.133 (29CFR)

E.- Bodily protection

Pictogram	PPE	Remarks
	Work clothing	Replace before any evidence of deterioration.
	Anti-slip work shoes	Replace before any evidence of deterioration.

F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

National volatile organic compound emission standards (40 CFR Part 59):

V.O.C. (Subpart C - Consumer): 0.95 % weight

V.O.C. (Coatings) at 68 ºF: 160.9 kg/m³ (160.9 g/L)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

*Not relevant due to the nature of the product, not providing information property of its hazards.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Appearance:

Physical state at 68 ºF:	Liquid
Appearance:	Fluid
Color:	Violet
Odor:	Sweet
Odour threshold:	Non-applicable *

Volatility:

Boiling point at atmospheric pressure:	213 ºF
Vapour pressure at 68 ºF:	2347 Pa
Vapour pressure at 122 ºF:	12366.62 Pa (12.37 kPa)
Evaporation rate at 68 ºF:	Non-applicable *

Product description:

Density at 68 ºF:	1029.5 kg/m³
Relative density at 68 ºF:	1.03
Dynamic viscosity at 68 ºF:	Non-applicable *
Kinematic viscosity at 68 ºF:	Non-applicable *
Kinematic viscosity at 104 ºF:	Non-applicable *
Concentration:	Non-applicable *
pH:	Non-applicable *
Vapour density at 68 ºF:	Non-applicable *
Partition coefficient n-octanol/water 68 ºF:	Non-applicable *
Solubility in water at 68 ºF:	Non-applicable *
Solubility properties:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *

Flammability:

Flash Point:	Non Flammable (>199.4 ºF)
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	437 ºF
Lower flammability limit:	Non-applicable *
Upper flammability limit:	Non-applicable *

Particle characteristics:

Median equivalent diameter:	Non-applicable

9.2 Other information:

Information with regard to physical hazard classes:

Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *
Corrosive to metals:	Non-applicable *
Heat of combustion:	Non-applicable *
Aerosols-total percentage (by mass) of flammable components:	Non-applicable *

Other safety characteristics:

Surface tension at 68 ºF:	Non-applicable *
Refraction index:	Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

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SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

10.2 Chemical stability:

Chemically stable under the conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Precaution	Precaution	Not applicable

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO2), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

The experimental information related to the toxicological properties of the product itself is not available

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than recommended by the occupational exposure limits, it may result in adverse effects on health depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, however it does contain substances classified as dangerous for this effect. For more information see section 3.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for skin contact. For more information see section 3.
- Contact with the eyes: Produces serious eye damage after contact.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous with carcinogenic effects. For more information see section 3.
  IARC: (r)-p-mentha-1,8-diene (3); 7-methyl-3-methyleneocta-1,6-diene (2B)
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects. For more information see section 3.
- Cutaneous: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met, however it does contain substances classified as dangerous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
Dodecyldimethylamine oxide CAS: 1643-20-5	LD50 oral	1064 mg/kg	Rat
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	
Alcohols, (C9-C11)-branched, ethoxylated CAS: 169107-21-5	LD50 oral	500 mg/kg (ATEi)	
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	
Isopentyl acetate CAS: 123-92-2	LD50 oral	7400 mg/kg	Rat
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	
3-ethoxy-4-hydroxybenzaldehyde CAS: 121-32-4	LD50 oral	3000 mg/kg	Rat
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	
Methyl salicylate CAS: 119-36-8	LD50 oral	887 mg/kg	Rat
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	
Citric Acid CAS: 77-92-9	LD50 oral	5400 mg/kg	Rat
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	
Citral CAS: 5392-40-5	LD50 oral	4950 mg/kg	Rat
	LD50 dermal	2250 mg/kg	Rabbit
	LC50 inhalation	Non-applicable	
Pin-2(3)-ene CAS: 80-56-8	LD50 oral	500 mg/kg	Rat
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	

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SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

12.1 Ecotoxicity (aquatic and terrestrial, where available):

Acute toxicity:

Identification	Concentration		Species	Genus
Dodecyldimethylamine oxide	LC50	31.8 mg/L (96 h)	Danio rerio	Fish
CAS: 1643-20-5	EC50	3.9 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	0.2 mg/L (72 h)	Pseudokirchneriella subcapitata	Algae
Isopentyl acetate	LC50	Non-applicable		
CAS: 123-92-2	EC50	42 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	Non-applicable		
Methyl salicylate	LC50	Non-applicable		
CAS: 119-36-8	EC50	50 mg/L (24 h)	Daphnia magna	Crustacean
	EC50	Non-applicable		
Citric Acid	LC50	1516 mg/L (96 h)	Lepomis macrochirus	Fish
CAS: 77-92-9	EC50	160 mg/L (48 h)	N/A	Crustacean
	EC50	Non-applicable		
Citral	LC50	6.1 mg/L (24 h)	Oryzias latipes	Fish
CAS: 5392-40-5	EC50	11 mg/L (24 h)	Daphnia magna	Crustacean
	EC50	16 mg/L (72 h)	Scenedesmus subspicatus	Algae

Chronic toxicity:

Identification	Concentration		Species	Genus
Dodecyldimethylamine oxide	NOEC	0.495 mg/L	Pimephales promelas	Fish
CAS: 1643-20-5	NOEC	0.7 mg/L	Daphnia magna	Crustacean

12.2 Persistence and degradability:

Identification	Degradability		Biodegradability	
Dodecyldimethylamine oxide	BOD5	Non-applicable	Concentration	20 mg/L
CAS: 1643-20-5	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	95.27 %
7-methyl-3-methyleneocta-1,6-diene	BOD5	Non-applicable	Concentration	100 mg/L
CAS: 123-35-3	COD	Non-applicable	Period	14 days
	BOD5/COD	Non-applicable	% Biodegradable	86 %
Methyl salicylate	BOD5	Non-applicable	Concentration	10 mg/L
CAS: 119-36-8	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	98.4 %

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Degradability		Biodegradability	
Citric Acid CAS: 77-92-9	BOD5	Non-applicable	Concentration	10 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	97 %
Citral CAS: 5392-40-5	BOD5	0.56 g O2/g	Concentration	100 mg/L
	COD	1.99 g O2/g	Period	28 days
	BOD5/COD	0.28	% Biodegradable	92 %
Pin-2(3)-ene CAS: 80-56-8	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	95 %

12.3 Bioaccumulative potential:

Identification	Bioaccumulation potential	
Dodecyldimethylamine oxide CAS: 1643-20-5	BCF	1
	Pow Log	1.85
	Potential	Low
Isopentyl acetate CAS: 123-92-2	BCF	10
	Pow Log	
	Potential	Low
7-methyl-3-methyleneocta-1,6-diene CAS: 123-35-3	BCF	324
	Pow Log	5.29
	Potential	High
Methyl salicylate CAS: 119-36-8	BCF	4
	Pow Log	2.55
	Potential	Low
Citric Acid CAS: 77-92-9	BCF	3
	Pow Log	-1.55
	Potential	Low
Citral CAS: 5392-40-5	BCF	10
	Pow Log	3.45
	Potential	Low
Pin-2(3)-ene CAS: 80-56-8	BCF	2800
	Pow Log	4.83
	Potential	Very High

12.4 Mobility in soil:

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Absorption/desorption		Volatility	
Dodecyldimethylamine oxide	Koc	616	Henry	0E+0 Pa·m³/mol
CAS: 1643-20-5	Conclusion	Low	Dry soil	Non-applicable
	Surface tension	Non-applicable	Moist soil	Non-applicable
Isopentyl acetate	Koc	70	Henry	59.78 Pa·m³/mol
CAS: 123-92-2	Conclusion	Very High	Dry soil	Non-applicable
	Surface tension	2.388E-2 N/m (77 ºF)	Moist soil	Yes
Isopentyl acetate	Koc	Non-applicable	Henry	Non-applicable
CAS: 624-41-9	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	2.458E-2 N/m (77 ºF)	Moist soil	Non-applicable
3-ethoxy-4-hydroxybenzaldehyde	Koc	Non-applicable	Henry	Non-applicable
CAS: 121-32-4	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	1.87E-2 N/m (529.12 ºF)	Moist soil	Non-applicable
7-methyl-3-methyleneocta-1,6-diene	Koc	1300	Henry	6515.2 Pa·m³/mol
CAS: 123-35-3	Conclusion	Low	Dry soil	Non-applicable
	Surface tension	Non-applicable	Moist soil	Yes
Methyl salicylate	Koc	222	Henry	4.76 Pa·m³/mol
CAS: 119-36-8	Conclusion	High	Dry soil	Non-applicable
	Surface tension	4.004E-2 N/m (77 ºF)	Moist soil	Non-applicable
Citric Acid	Koc	Non-applicable	Henry	Non-applicable
CAS: 77-92-9	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	2.045E-2 N/m (663.67 ºF)	Moist soil	Non-applicable
Pin-2(3)-ene	Koc	Non-applicable	Henry	Non-applicable
CAS: 80-56-8	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	2.587E-2 N/m (77 ºF)	Moist soil	Non-applicable

12.5 Results of PBT and vPvB assessment:

Non-applicable

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Disposal methods:

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations. In case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See epigraph 6.2.

Regulations related to waste management:

Legislation related to waste management:

40 CFR Part 261- IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

SECTION 14: TRANSPORT INFORMATION

This product is not regulated for transport.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations specific for the product in question:

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SECTION 15: REGULATORY INFORMATION (continued)

SARA Title III - Toxic Chemical Release Inventory Reporting (Section 313): Non-applicable
California Proposition 65 (the Safe Drinking Water and Toxic Enforcement Act of 1986): 7-methyl-3-methyleneocta-1,6-diene
The Toxic Substances Control Act (TSCA) : Water ; Alcohols, (C9-C11)-branched, ethoxylated ; Amines, coco alkyldimethyl, N-oxides ; Dodecyldimethylamine oxide ; (r)-p-mentha-1,8-diene ; Isopentyl acetate ; Isopentyl acetate ; 3-ethoxy-4-hydroxybenzaldehyde ; 7-methyl-3-methyleneocta-1,6-diene ; Methyl salicylate ; Citric Acid ; Citral ; Pin-2(3)-ene
Massachusetts RTK - Substance List: Isopentyl acetate ; Isopentyl acetate ; Pin-2(3)-ene
New Jersey Worker and Community Right-to-Know Act: Isopentyl acetate ; Pin-2(3)-ene
New York RTK - Substance list: Isopentyl acetate ; Pin-2(3)-ene
Pennsylvania Worker and Community Right-to-Know Law: Isopentyl acetate ; Methyl salicylate ; Pin-2(3)-ene
CANADA-Domestic Substances List (DSL): Water ; Alcohols, (C9-C11)-branched, ethoxylated ; Amines, coco alkyldimethyl, N-oxides ; Dodecyldimethylamine oxide ; (r)-p-mentha-1,8-diene ; Isopentyl acetate ; Isopentyl acetate ; 3-ethoxy-4-hydroxybenzaldehyde ; 7-methyl-3-methyleneocta-1,6-diene ; Methyl salicylate ; Citric Acid ; Citral ; Pin-2(3)-ene
CANADA-Non-Domestic Substances List (NDSL): Non-applicable
NTP (National Toxicology Program): Non-applicable
Minnesota - Hazardous substances ERTK: Isopentyl acetate
Rhode Island - Hazardous substances RTK: Isopentyl acetate ; Methyl salicylate
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096): Non-applicable
Hazardous Air Pollutants (Clean Air Act): Non-applicable
Hazardous substances release notification under CERCLA sections 102-103 (40 CFR Part 302): Isopentyl acetate (5000 pounds)

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as data used in a risk evaluation of the local circumstances in order to establish the necessary risk prevention measures for the manipulation, use, storage and disposal of this product.

Other legislation:

Take into consideration other applicable federal, state, and local laws and local regulations.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with Appendix d to §1910.1200 - Safety data sheets

Texts of the legislative phrases mentioned in section 2:

H318: Causes serious eye damage.
H317: May cause an allergic skin reaction.

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

29 CFR 1910.1200:

Acute Tox. 4: H302 - Harmful if swallowed.
Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways.
Carc. 2: H351 - Suspected of causing cancer.
Eye Dam. 1: H318 - Causes serious eye damage.
Eye Irrit. 2A: H319 - Causes serious eye irritation.
Flam. Liq. 3: H226 - Flammable liquid and vapour.
Flam. Liq. 4: H227 - Combustible liquid.
Skin Irrit. 2: H315 - Causes skin irritation.
Skin Sens. 1: H317 - May cause an allergic skin reaction.

Advice related to training:

Minimal training is recommended to prevent industrial risks for staff using this product, in order to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

Occupational Safety & Health Administration (OSHA).

Abbreviations and acronyms:

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SECTION 16: OTHER INFORMATION (continued)

IMDG: International maritime dangerous goods code
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
COD: Chemical Oxygen Demand
BOD5: 5-day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
CL50: Lethal Concentration 50
EC50: Effective concentration 50
Log-POW: Octanol-water partition coefficient
Koc: Partition coefficient of organic carbon
IARC: International Agency for Research on Cancer

Manufacturer Disclaimer: The information contained in this safety date sheet ("SDS") is based on sources, technical knowledge and current legislation. Furthermore, is based on data believed to be accurate; thus, the company does not assume any liability for its accuracy. The information provided herein cannot be considered a guarantee of the properties of this product and the same is simply a description of the security requirements. The use, occupational methodology and/or conditions for users of this product are not within our awareness or control. It is ultimately the responsibility of the user(s) to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information of this SDS only refers to this product, which should not be used for purposes other than those specified. Finally, the manner in which this product is used and whether there is any infringement of patents is the sole responsibility of the user(s).

END OF SAFETY DATA SHEET