

Material Safety Data Sheet

	S	TDG Road/Rail	Health Hazard	
		A	Fire Hazard	
	\mathbf{T}	<u> </u>	Reactivity	
<u> </u>		•	Personal Protection	
			Approved for use in Foo	d & Beverage plants
. Product an	nd company iden	tification		
roduct name : SIPHON	I	Code	20-10140	
ate of issue (yyyy/mm/dd)	: 2014-03-21.	Material uses	: Industrial applications: Deodo and grease traps.	orizing treatment for drains
Victoria G6P 7E	de l'Artisan aville, Qc	Manufacturer	: Sani-Marc Inc. 42 rue de l'Artisan Victoriaville, Qc G6P 7E3 1-819-758-1541	
In case of emer	gency Emergency pho	one: CANUTEC (613) 996-6666 (Co	ollect calls accepted)	
2. Hazards id	dentification			
			6	
	· · ·	cted when manufacturer's direction	tor use and proper security m	neasures are observed
		Odor : Orange [Strong]		
mergency overview :	WARNING!			
	and flame. Do not breathe vapor	allowed. Irritating to eyes and respiratory sy or mist. Do not ingest. Avoid contact with ad until ready for use. Wash thoroughly afte	eyes, skin and clothing. Use only wit	
outes of entry :	Eye contact. Ingestion.			
Potential acute health effects				
Inhalation : Irritating to re	espiratory system.			
0				
Ingestion : Toxic if swall				
Ingestion : Toxic if swall Skin : Slightly irritat	owed. ing to the skin.			
Ingestion : Toxic if swall Skin : Slightly irritat Eyes : Irritating to explanate	owed. ing to the skin.			
Ingestion : Toxic if swall Skin : Slightly irritat Eyes : Irritating to e See toxicological information	owed. ing to the skin. yes.	on ingredients		
Ingestion : Toxic if swall Skin : Slightly irritat Eyes : Irritating to ey See toxicological information B. Composit	owed. ing to the skin. yes. (Section 11) for more details.	on ingredients	<u>CAS number</u>	<u>% (w/w)</u>
Ingestion : Toxic if swall Skin : Slightly irritat Eyes : Irritating to exist See toxicological information B. Composit Name (R)-p-mentha-1,8-diene	owed. ing to the skin. yes. (Section 11) for more details.	on ingredients	5989-27-5	60 - 100
ngestion : Toxic if swall Skin : Slightly irritat Eyes : Irritating to ex- See toxicological information B. Composit Name (R)-p-mentha-1,8-diene Alcohols, C9-11, ethoxylate	owed. ing to the skin. yes. (Section 11) for more details. ion/information (5989-27-5 68439-46-3	60 - 100 5 - 10
Ingestion : Toxic if swall Skin : Slightly irritat Eyes : Irritating to exist See toxicological information B. Composit Name (R)-p-mentha-1,8-diene Alcohols, C9-11, ethoxylate Quaternary ammonium corr	owed. ing to the skin. yes. (Section 11) for more details. ion/information (id npounds, benzyl-C12-16-alkyld)	imethyl, chlorides	5989-27-5 68439-46-3 68424-85-1	60 - 100 5 - 10 1 - 5
Ingestion : Toxic if swall Skin : Slightly irritat Eyes : Irritating to ey See toxicological information B. Composit Name (R)-p-mentha-1,8-diene Alcohols, C9-11, ethoxylate Quaternary ammonium com There are no additional ingree	owed. ing to the skin. yes. (Section 11) for more details. ion/information (id npounds, benzyl-C12-16-alkyld)	imethyl, chlorides current knowledge of the supplier and in	5989-27-5 68439-46-3 68424-85-1	60 - 100 5 - 10 1 - 5
Ingestion : Toxic if swall Skin : Slightly irritat Eyes : Irritating to ey See toxicological information 3. Composit Name (R)-p-mentha-1,8-diene Alcohols, C9-11, ethoxylate Quaternary ammonium corr There are no additional ingred health or the environment and	owed. ing to the skin. yes. (Section 11) for more details. ion/information (id hpounds, benzyl-C12-16-alkyldidients present which, within the of d hence require reporting in this s	imethyl, chlorides current knowledge of the supplier and in	5989-27-5 68439-46-3 68424-85-1	60 - 100 5 - 10 1 - 5
Ingestion : Toxic if swall Skin : Slightly irritat Eyes : Irritating to ey See toxicological information 3. Composit Name (R)-p-mentha-1,8-diene Alcohols, C9-11, ethoxylate Quaternary ammonium com There are no additional ingree health or the environment and 4. First aid n	owed. ing to the skin. yes. (Section 11) for more details. ion/information (id npounds, benzyl-C12-16-alkyldid dients present which, within the of d hence require reporting in this so neasures	imethyl, chlorides current knowledge of the supplier and in	5989-27-5 68439-46-3 68424-85-1 the concentrations applicable, are	60 - 100 5 - 10 1 - 5 classified as hazardous to
Ingestion : Toxic if swall Skin : Slightly irritat Eyes : Irritating to eye See toxicological information 3. Composit Name (R)-p-mentha-1,8-diene Alcohols, C9-11, ethoxylate Quaternary ammonium com There are no additional ingree health or the environment and 4. First aid n Eye contact	owed. ing to the skin. yes. (Section 11) for more details. ion/information (ad npounds, benzyl-C12-16-alkyldid dients present which, within the c d hence require reporting in this s NEASURES : Check for and remove any co and lower eyelids. Get medic : In case of contact, immediate	imethyl, chlorides current knowledge of the supplier and in section.	5989-27-5 68439-46-3 68424-85-1 the concentrations applicable, are	60 - 100 5 - 10 1 - 5 classified as hazardous to
Ingestion : Toxic if swall Skin : Slightly irritat Eyes : Irritating to eye See toxicological information B. Composit Mame (R)-p-mentha-1,8-diene Alcohols, C9-11, ethoxylate Quaternary ammonium com There are no additional ingree health or the environment and 4. First aid n Sye contact kin contact	owed. ing to the skin. yes. (Section 11) for more details. ion/information (ad npounds, benzyl-C12-16-alkyldid dients present which, within the c d hence require reporting in this s NEASURES : Check for and remove any co and lower eyelids. Get medic : In case of contact, immediate Wash clothing before reuse. : Move exposed person to frest	imethyl, chlorides current knowledge of the supplier and in section.	5989-27-5 68439-46-3 68424-85-1 the concentrations applicable, are plenty of water for at least 20 minutes, 20 minutes while removing contamin ar or if respiratory arrest occurs, provi	60 - 100 5 - 10 1 - 5 classified as hazardous to , occasionally lifting the upp nated clothing and shoes. ide artificial respiration or
Ingestion : Toxic if swall Skin : Slightly irritat Eyes : Irritating to ey See toxicological information 3. Composit (R)-p-mentha-1,8-diene Alcohols, C9-11, ethoxylate Quaternary ammonium com There are no additional ingred health or the environment and 4. First aid n Eye contact Skin contact healation	owed. ing to the skin. yes. (Section 11) for more details. ion/information (ad apounds, benzyl-C12-16-alkyldi dients present which, within the c d hence require reporting in this s NEASURES : Check for and remove any co and lower eyelids. Get medic : In case of contact, immediate Wash clothing before reuse. : Move exposed person to frest oxygen by trained personnel. : Wash out mouth with water.	imethyl, chlorides current knowledge of the supplier and in section. Intact lenses. Immediately flush eyes with p cal attention immediately. Ity flush skin with plenty of water for at least Get medical attention immediately. h air. If not breathing, if breathing is irregula Loosen tight clothing such as a collar, tie, I Do not induce vomiting unless directed to d	5989-27-5 68439-46-3 68424-85-1 the concentrations applicable, are plenty of water for at least 20 minutes, 20 minutes while removing contamin ar or if respiratory arrest occurs, provi belt or waistband. Get medical attent	60 - 100 5 - 10 1 - 5 classified as hazardous to , occasionally lifting the upp nated clothing and shoes. ide artificial respiration or tion immediately.
Ingestion : Toxic if swall Skin : Slightly irritat Eyes : Irritating to ey See toxicological information 3. Composit Name (R)-p-mentha-1,8-diene Alcohols, C9-11, ethoxylate Quaternary ammonium com There are no additional ingred health or the environment and 4. First aid n Eye contact Skin contact malation ngestion	owed. ing to the skin. yes. (Section 11) for more details. ion/information (ad apounds, benzyl-C12-16-alkyldi dients present which, within the of d hence require reporting in this s DEASURES : Check for and remove any co and lower eyelids. Get mediate Wash clothing before reuse. : Move exposed person to fress oxygen by trained personnel. : Wash out mouth with water. I unconscious person. Get me	imethyl, chlorides current knowledge of the supplier and in section. Intact lenses. Immediately flush eyes with p cal attention immediately. In flush skin with plenty of water for at least Get medical attention immediately. h air. If not breathing, if breathing is irregula Loosen tight clothing such as a collar, tie, I Do not induce vomiting unless directed to d udical attention immediately.	5989-27-5 68439-46-3 68424-85-1 the concentrations applicable, are plenty of water for at least 20 minutes, 20 minutes while removing contamin ar or if respiratory arrest occurs, provi belt or waistband. Get medical attent o so by medical personnel. Never give	60 - 100 5 - 10 1 - 5 classified as hazardous to , occasionally lifting the upp nated clothing and shoes. ide artificial respiration or tion immediately. ve anything by mouth to an
Ingestion : Toxic if swall Skin : Slightly irritat Eyes : Irritating to ey See toxicological information 3. Composit Name (R)-p-mentha-1,8-diene Alcohols, C9-11, ethoxylate Quaternary ammonium com There are no additional ingred health or the environment and 4. First aid n Eye contact Skin contact nhalation ngestion	owed. ing to the skin. yes. (Section 11) for more details. ion/information (ad npounds, benzyl-C12-16-alkyldid dients present which, within the c d hence require reporting in this s NEASURES : Check for and remove any co and lower eyelids. Get medic : In case of contact, immediate Wash clothing before reuse. : Move exposed person to frest oxygen by trained personnel. : Wash out mouth with water. unconscious person. Get me : No action shall be taken invol should wear an appropriate m	imethyl, chlorides current knowledge of the supplier and in section. Intact lenses. Immediately flush eyes with p cal attention immediately. Ity flush skin with plenty of water for at least Get medical attention immediately. h air. If not breathing, if breathing is irregula Loosen tight clothing such as a collar, tie, I Do not induce vomiting unless directed to d	5989-27-5 68439-46-3 68424-85-1 the concentrations applicable, are plenty of water for at least 20 minutes, 20 minutes while removing contamin ar or if respiratory arrest occurs, provi belt or waistband. Get medical attent o so by medical personnel. Never giv aining. If it is suspected that fumes a It may be dangerous to the person p	60 - 100 5 - 10 1 - 5 classified as hazardous to , occasionally lifting the upp hated clothing and shoes. ide artificial respiration or tion immediately. ve anything by mouth to an are still present, the rescuer
Ingestion : Toxic if swall Skin : Slightly irritat Eyes : Irritating to ey See toxicological information 3. Composit Name (R)-p-mentha-1,8-diene Alcohols, C9-11, ethoxylate Quaternary ammonium com There are no additional ingred health or the environment and 4. First aid n Eye contact Skin contact nhalation ngestion Protection of first-aiders	owed. ing to the skin. yes. (Section 11) for more details. ion/information (ad npounds, benzyl-C12-16-alkyldid dients present which, within the c d hence require reporting in this s NEASURES : Check for and remove any co and lower eyelids. Get medic : In case of contact, immediate Wash clothing before reuse. : Move exposed person to frest oxygen by trained personnel. : Wash out mouth with water. unconscious person. Get me : No action shall be taken invol should wear an appropriate m	imethyl, chlorides current knowledge of the supplier and in section.	5989-27-5 68439-46-3 68424-85-1 the concentrations applicable, are plenty of water for at least 20 minutes, 20 minutes while removing contamin ar or if respiratory arrest occurs, provi belt or waistband. Get medical attent o so by medical personnel. Never giv aining. If it is suspected that fumes a It may be dangerous to the person p	60 - 100 5 - 10 1 - 5 classified as hazardous to , occasionally lifting the upp hated clothing and shoes. ide artificial respiration or tion immediately. ve anything by mouth to an are still present, the rescuer

: Use dry chemical, CO_2 , water spray (fog) or foam.

: Do not use water jet.

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.

Suitable

Not suitable

Special exposure hazards

5. Fire-fighting measures

Hazardous thermal decomposition	Decomposition products may include the following materials:
products	carbon dioxide
	carbon monoxide
Special protective equipment for	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece
fire-fighters	operated in positive pressure mode.

6. Accidental release measures

Personal precautions

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

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

Small spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if watersoluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. Handling and storage

Handling : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

	-	-									
Occupational exposure limits		TWA (8	hours)		STEL (1	5 mins)		Ceiling			
Ingredient	List name	ppm	mg/m³	Other	ppm	mg/m³	Other	ppm	mg/m³	Other	Notations
No exposure limit value known.											

Consult local authoriti	es for acceptable exposure limits.
Recommended monito procedures	ring : 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. No monitoring equipment are required if no occupationnal exposure limit values are suggested.
Engineering measures	 Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.
Personal protection	
	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
a r	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
5	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
Skin : F S V	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Environmental exposicon controls	ure : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

9. Physical and chemical properties

1

Physical state	: Liquid. [Transparent liquid]	Molecular formula	: Not applicable.	Flammable limits	: Lower: 0.7% Upper: 6.5%
Color	: Yellow. [Dark]	Molecular weight	: Not applicable.	Burning rate	: Not applicable.
Odor	: Orange [Strong]	Vapor pressure	: 0.16 kPa (1.2 mm Hg) [room temperature]	Burning time	: Not applicable.
Relative density	: 0.86	Vapor density	: 4.7 [Air = 1]	Critical temperature	: Not available.
рН	: 5.5	Volatility	: Not available.	Auto-ignition temperature	: Not available.
Viscosity	: Not available.	Evaporation rate	: Not available.	Flash point	: Closed cup: 46°C (114.8°F)
Odor threshold	: Not available.	Ionicity (in water)	: Cationic.	Dispersibility properties	: Not available.
Solubility	: Very slightly soluble in the follow	ving materials: cold water	and hot water.		
Melting/freezing p	oint Not available.		Boilir	ng/condensation point : 169°C	C (336.2°F)

10. Stability and reactivity

Chemical stability	: The product is stable.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
Materials to avoid	: Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.

11. Toxicological information

The symptoms, hazards and situations described in this section are not expected when manufacturer's direction for use, proper security measures and given professionnal exposure limits are correctly followed.

Potential chronic health effects

Over-sopoure slans/symptoms Inhalation Adverse symptoms may include the following: respiratory tract irritation coupling Ingestion : Adverse symptoms may include the following: irritation coupling is specified ata Skin : Adverse symptoms may include the following: irritation redness : Second the following: irritation redness Eyes : Adverse symptoms may include the following: irritation redness : Species Dose Exposure Medical conditions aggravated by over-exposure redness : : Species Dose Exposure Acute toxicity Product/ingredient name Result Species Dose Exposure (R)-p-mentha-1,8-diene LD50 Dermal LD50 Dermal LD50 Oral Rat 4400 mg/kg - - Alcohols, C9-11, ethoxylated LD50 Oral Rat 1400 mg/kg -<	Chronic effects : No known significant e Carcinogenicity : No known significant e Mutagenicity : No known significant e Teratogenicity : No known significant e Developmental effects : No known significant e Fertility effects : No known significant e Target organs : Not available.	ffects or critical h ffects or critical h ffects or critical h ffects or critical h ffects or critical h	azards. azards. azards. azards.				
Inhalation: Adverse symptoms may include the following: respiratory tract initiation coughingIngestion: No specific data.Skin: Adverse symptoms may include the following: iritiation rednessEyes: Adverse symptoms may include the following: pain or iritiation watering rednessMedical conditions aggravated by over-exposure:Acute toxicityDoseExposureProduct/ingredient nameResultSpeciesDoseExposure(R)-p-mentha-1,8-dieneLD50 Dermal LD50 OralRat4400 mg/kg-Alcohols, C9-11, ethoxylatedLD50 Oral LD50 OralRat4400 mg/kg-Quaternary ammonium compounds, benzyl- (r12-16-alkyldimethyl, chlorides (R)-p-mentha-1,8-dieneResultSpeciesScoreExposureObservationProduct/ingredient nameResultSpeciesDoceExposureExposure(R)-p-mentha-1,8-dieneResultSpeciesDoceExposureExposure(C12-16-alkyldimethyl, chlorides (R)-p-mentha-1,8-dieneResultSpeciesScoreExposureObservationProduct/ingredient nameResultSpeciesScoreExposureObservation(R)-p-mentha-1,8-dieneSkin - Mild irritantRabbit-24 hours 10-Outernary ammonium compounds, benzyl- C12-16-alkyldimethyl, chlorides Carcinegonicity ClassificationSkin - Severe irritantRabbit-24 hours 10-Product/ingredient nameACGHIARCEPANOSHNTP							
Ingestion: No specific data.Skin: Adverse symptoms may include the following: iritiation rednessEyes: Adverse symptoms may include the following: pain or iritation watering rednessMedical conditions aggravated by over-exposure:Medical conditions aggravated by over-exposure:Acute toxicity.Product/ingredient nameResultSpecies(R)-p-mentha-1,8-dieneLD50 Dermal LD50 Oral LD50 OralRat4400 mg/kgAlcohols, C9-11, ethoxylatedLD50 Oral LD50 Oral LD50 OralRat1200 mg/kgAlcohols, C9-11, ethoxylatedLD50 Oral LD50 OralRat1400 mg/kgOuatermary ammonium compounds, benzyl- C12-16-alkyldimethyl, chlorides Iritation/CorrosionSecreeScore ExposureObservation PercentProduct/ingredient nameResultSpeciesScoreExposureObservation OralAlcohols, C9-11, ethoxylatedLD50 Oral LD50 OralRat426 mg/kg-Ouatermary ammonium compounds, benzyl- C12-16-alkyldimethyl, chlorides Iritation/CorrosionSecreExposureObservation ObservationQuatermary ammonium compounds, benzyl- C12-16-alkyldimethyl, chlorides Carcinogenicity ClassificationSkin - Mild irritantRabbit-24 hours 10 PercentQuatermary ammonium compounds, benzyl- C12-16-alkyldimethyl, chlorides Carcinogenicity ClassificationSkin - Severe irritantRabbit-24 hours 10 PercentProduct/ingredient nameKGIHIARCEPANOSHN	Inhalation : Adverse symptoms may include the foll respiratory tract irritation	owing:					
irritation rednessEyesirritation watering rednessMedical conditions aggravated by over-exposure redness::Medical conditions aggravated by over-exposure redness::Product/ingredient nameResultSpecies LD50 OralDosExposure RatAlcohols, C9-11, ethoxylated LD50 OralLD50 Oral RatRat1400 mg/kg redneg-Quaternary ammonium compounds, benzyl- C12-16-alkyldimethyl, chlorides Carcinogenicity Classification:Skin - Severe irritant RabbitRabbit-24 hours 10 PercentQuaternary ammonium compounds, benzyl- C12-16-alkyldimethyl, chlorides Carcinogenicity ClassificationSkin - Severe irritant RabbitRabbit-24 hours 10 PercentQuaternary am							
Eyes: Adverse symptoms may include the following: pain or initiation watering redness: Adverse symptoms may include the following: pain or initiation watering redness: Secies: Secies <td>irritation</td> <td>owing:</td> <td></td> <td></td> <td></td> <td></td> <td></td>	irritation	owing:					
Medical conditions aggravated by over-exposure None known.:Acute toxicityResultSpeciesDoseExposureProduct/ingredient nameResultSpeciesDoseExposure(R)-p-mentha-1,8-dieneLD50 DermalRat4400 mg/kg-LD50 OralRat4400 mg/kgLD50 OralRat1200 mg/kgAlcohols, C9-11, ethoxylatedLD50 OralRat1400 mg/kg-Quaternary ammonium compounds, benzyl- C12-16-alkyldimethyl, chlorides Irritation/CorrosionLD50 OralRat426 mg/kg-Product/ingredient nameResultSpeciesScoreExposureObservation(R)-p-mentha-1,8-dieneSkin - Mild irritantRabbit-24 hours 10 Percent-Quaternary ammonium compounds, benzyl- C12-16-alkyldimethyl, chlorides Gracinogenicity ClassificationSkin - Severe irritantRabbit-24 hours 10 Percent-Product/ingredient nameACGIHIARCEPANIOSHNTPOSHA	Eyes : Adverse symptoms may include the foll pain or irritation watering	owing:					
Product/ingredient nameResultSpeciesDoseExposure(R)-p-mentha-1,8-dieneLD50 Dermal LD50 OralRabbit5000 mg/kg-LD50 Oral LD50 OralRat4400 mg/kg-Alcohols, C9-11, ethoxylatedLD50 Oral LD50 OralRat1200 mg/kg-Quaternary ammonium compounds, benzyl- C12-16-alkyldimethyl, chloridesLD50 Oral LD50 OralRat1400 mg/kg-Product/ingredient nameResultSpeciesScoreExposureObservation(R)-p-mentha-1,8-dieneSkin - Mild irritantRabbit-24 hours 10 Percent-Quaternary ammonium compounds, benzyl- 	Medical conditions aggravated by over-exposure	:					
(R)-p-mentha-1,8-dieneLD50 Dermal LD50 Oral LD50 Oral RatRabbit Ado mg/kg5000 mg/kg-Alcohols, C9-11, ethoxylatedLD50 Oral LD50 OralRat4400 mg/kg-LD50 Oral LD50 OralRat1200 mg/kg-Quaternary ammonium compounds, benzyl- C12-16-alkyldimethyl, chloridesLD50 Oral LD50 OralRat1400 mg/kg-Product/ingredient nameResultSpeciesScoreExposureObservation(R)-p-mentha-1,8-dieneSkin - Mild irritantRabbit-24 hours 10 Percent-Quaternary ammonium compounds, benzyl- C12-16-alkyldimethyl, chlorides Carcinogenicity ClassificationSkin - Severe irritantRabbit-24 hours 10 Percent-Product/ingredient nameACGIHIARCEPANIOSHNTPOSHA	Acute toxicity						
LD50 OralRat4400 mg/kg-Alcohols, C9-11, ethoxylatedLD50 OralRat4400 mg/kg-LD50 OralRat1200 mg/kg-Quaternary ammonium compounds, benzyl- C12-16-alkyldimethyl, chlorides Irritation/CorrosionLD50 OralRat1400 mg/kg-Product/ingredient nameResultSpeciesScoreExposureObservation(R)-p-mentha-1,8-dieneSkin - Mild irritantRabbit-24 hours 10 Percent-Quaternary ammonium compounds, benzyl- C12-16-alkyldimethyl, chlorides Irritation/CorrosionSkin - Severe irritantRabbit-25 milligrams-Product/ingredient nameACGIHIARCEPANIOSHNTPOSHA	Product/ingredient name	Result		Species	Dose		Exposure
Alcohols, C9-11, ethoxylatedLD50 OralRat1200 mg/kg-Quaternary ammonium compounds, benzyl- C12-16-alkyldimethyl, chlorides Irritation/CorrosionLD50 OralRat1400 mg/kg-Product/ingredient nameResultSpeciesScoreExposureObservation(R)-p-mentha-1,8-dieneSkin - Mild irritantRabbit-24 hours 10 Percent-Quaternary ammonium compounds, benzyl- C12-16-alkyldimethyl, chloridesSkin - Severe irritantRabbit-25 milligrams-Quaternary ammonium compounds, benzyl- C12-16-alkyldimethyl, chlorides Carcinogenicity ClassificationACGIHIARCEPANIOSHNTPOSHA	(R)-p-mentha-1,8-diene	LD50 O	ral	Rat	4400	mg/kg	-
Quaternary ammonium compounds, benzyl- C12-16-alkyldimethyl, chlorides Irritation/CorrosionLD50 OralRat426 mg/kg-Product/ingredient nameResultSpeciesScoreExposureObservation(R)-p-mentha-1,8-dieneSkin - Mild irritantRabbit-24 hours 10 Percent-Quaternary ammonium compounds, benzyl- C12-16-alkyldimethyl, chlorides Carcinogenicity ClassificationSkin - Severe irritantRabbit-25 milligrams-Product/ingredient nameACGIHIARCEPANIOSHNTPOSHA	Alcohols, C9-11, ethoxylated	LD50 O	ral	Rat	1200	mg/kg	-
(R)-p-mentha-1,8-dieneSkin - Mild irritantRabbit-24 hours 10 Percent-Quaternary ammonium compounds, benzyl- C12-16-alkyldimethyl, chlorides Carcinogenicity ClassificationSkin - Severe irritantRabbit-25 milligrams-Product/ingredient nameACGIHIARCEPANIOSHNTPOSHA	C12-16-alkyldimethyl, chlorides					0 0	-
Quaternary ammonium compounds, benzyl- C12-16-alkyldimethyl, chlorides Skin - Severe irritant Rabbit - 25 milligrams - Carcinogenicity Classification Product/ingredient name ACGIH IARC EPA NIOSH NTP OSHA	Product/ingredient name	Result		Species	Score	Exposure	Observation
Quaternary ammonium compounds, benzyl- Skin - Severe irritant Rabbit - 25 milligrams - C12-16-alkyldimethyl, chlorides Carcinogenicity Classification - ACGIH IARC EPA NIOSH NTP OSHA	(R)-p-mentha-1,8-diene	Skin - N	lild irritant	Rabbit	-		-
-	C12-16-alkyldimethyl, chlorides	Skin - S	evere irritant	Rabbit	-		-
(R)-p-mentha-1,8-diene - 3	Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
	(R)-p-mentha-1,8-diene	-	3	-	-	-	-

Ecological information 12.

Ecotoxicity : Readily biodegradab Aquatic ecotoxicity	le			
Product/ingredient name	Test	Result	Exposure	Species
(R)-p-mentha-1,8-diene	-	Acute EC50 421 µg/l Fresh water	48 hours	Daphnia - Water flea - Daphnia magna
	-	Acute EC50 688 µg/l Fresh water	96 hours	Fish - Fathead minnow - Pimephales promelas
Alcohols, C9-11, ethoxylated	-	Acute EC50 5.36 to 6.25 mg/l Fresh water	48 hours	Crustaceans - Water flea - Ceriodaphnia dubia - Neonate
	-	Acute EC50 7 mg/l Fresh water	48 hours	Daphnia - Water flea - Daphnia magna
	-	Acute LC50 8500 to 12000 μg/l Fresh water	96 hours	Fish - Fathead minnow - Pimephales promelas
Quaternary ammonium compounds, benzyl- C12-16-alkyldimethyl, chlorides	-	Acute EC50 670 µg/l Fresh water	96 hours	Algae - Green algae - Chlorella pyrenoidosa - Exponential growth phase
	-	Acute EC50 5.9 ppb Fresh water	48 hours	Daphnia - Water flea - Daphnia magna
	-	Acute LC50 0.28 ppm Fresh water	96 hours	Fish - Fathead minnow - Pimephales promelas
Toxicity of the products of : The	e products of biodegradation	are as toxic as the original product.		

biodegradation

Disposal considerations 13

Waste disposal

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Waste stream

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.

Transport information 14.

: Not available.

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	1993	UN 1993 FLAMMABLE LIQUIDS N.O.S. ((R)-p-mentha-1,8-diene)	3	111	1 Proventing (1979)	-
TDG Classification	1993	Flammable liquid, N.O.S. ((R)-p- mentha-1,8-diene)	3	III		-

PG* : Packing group

Regulatory information 15.

United States inventory (TSCA 8b)	: All components are listed or exempted.
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	: CEPA Toxic substances: None of the components are listed. Canadian ARET: None of the components are listed. Canadian NPRI: None of the components are listed. Alberta Designated Substances: None of the components are listed. Ontario Designated Substances: None of the components are listed. Quebec Designated Substances: None of the components are listed.
Canada inventory	:At least one component is not listed.
Other certification	

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.

16. Other information on the product

Label requirements

: FLAMMABLE LIQUID AND VAPOR. COMBUSTIBLE. HARMFUL IF SWALLOWED. CAUSES RESPIRATORY TRACT AND EYE IRRITATION. MAY CAUSE SKIN IRRITATION.

QA and Documentation Department

MSDS prepared by:

Sani-Marc Inc. 42 rue de l'Artisan

Victoriaville, Qc G6P 7E3

1-819-758-1541

Date of printing (YYYY-MM-DD)	: 2014-03-21
Date of issue (YYYY-MM-DD)	: 2014-03-21

Note: MSDS are valid for a 3 years period after the date of issue

Indicates information that has changed from previously issued version.

Notice to reader

There are potential hazards to people and goods associated with the use of this product which are detailed in the present Material Safety Data Sheet (MSDS). To minimize potential hazards associated with this product it is of users responsibility to conform the directions for use and all other instructions provided in the Material Safety Data Sheet (MSDS) of this product. The manufacturer, distributors and suppliers of this product are exonerating themselves and consequently shall not be liable for any prejudice or damage of any kind, resulting from the use of this product may not be in accordance with the directions for use or all the instructions provided in the present Material Safety Data Sheet (MSDS) or resulting from an unadvised use of the present product.

Emergency phone: CANUTEC (613) 996-6666 (Collect calls accepted)