SAFETY DATA SHEET

SECTION 1) CHEMICAL PRODUCT AND MANUFACTURER'S IDENTIFICATION

Product ID: MARKO CITRUS BLOSSOM HOSPITAL

Product Name: MARKO CITRUS BLOSSOM HOSPITAL

Revision Date: Mar 08 2023 **Date Printed:** Jul 23, 2024

Version: 3.0 **Supersedes Date:** Nov 22, 2019

Distributor's Name: MARKO, INC.

Address: 1310 SOUTHPORT RD - SPARTANBURG, SC 29306

Emergency Phone: 1-800-535-5053

Information Phone Number: (864) 585-2259

Fax:

Product/Recommended Uses: Disinfectant

SECTION 2) HAZARDS IDENTIFICATION

Classification

Aerosols - Category 2

Gases Under Pressure - Liquefied Gas

Eye Irritation - Category 2A

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 0.69%

Pictograms



Signal Word

Warning

Hazardous Statements - Physical

H223 - Flammable aerosol.

H280 - Contains gas under pressure; may explode if heated.

Hazardous Statements - Health

H319 - Causes serious eye irritation.

Precautionary Statements - General

P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

P103 - Read label before use.

Precautionary Statements - Prevention

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P211 - Do not spray on an open flame or other ignition source

P251 - Do not pierce or burn, even after use.

P280 - Wear eye and face protection.

P264 - Wash face, hands and any exposed skin thoroughly after handling.

Precautionary Statements - Response

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 - If eye irritation persists: Get medical attention.

Precautionary Statements - Storage

P410 + P412 - Protect from sunlight. Do not expose to temperatures exceeding 50°C / 122°F.

P403 - Store in a well-ventilated place.

Precautionary Statements - Disposal

No data available.

SECTION 3) COMPOSITION, INFORMATION ON INGREDIENTS

CAS	Chemical Name	% By Weight
64-17-5	ETHYL ALCOHOL	30% - 35%
106-97-8	BUTANE	10% - 15%
74-98-6	PROPANE	1% - 5%

See label for active ingredient information. The exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4) FIRST-AID MEASURES

Inhalation

If overcome by vapor, move person to fresh air.

Eye Contact

Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Skin Contact

Wash with soap and water. If irritation develops, consult a physician .

Ingestion

Ingestion from an aerosol product is unlikely to occur.

Most important symptoms and effects, both acute and delayed

Symptom

Acute, Deliberate inhalation of concentrated vapor or mist may cause headaches. Prolonged and repeated contact with the eyes may cause mild irritation.

SECTION 5) FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Dry chemical, CO2 or water spray.

Unsuitable Extinguishing Media

Use water spray or fog; do not use straight streams.

Specific Hazards in Case of Fire

Containers are under pressure. Temperatures above 130 °F may cause cans to burst. Thermal decomposition may yield gases like carbon monoxide and carbon dioxide.

Sensitivity to Mechanical Impact: Content under pressure keep away from heat and open flame.
Sensitivity to Static Discharge: Keep away from heat, spark, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity.

Protective equipment and precautions for firefighters

Use personal protective equipment as required.

SECTION 6) ACCIDENTAL RELEASE MEASURES

Methods for and material for containment and cleaning up

Provide adequate ventilation to area being treated. Soak up spills with chemically inert, absorbent material. Clean contaminated surface thoroughly.

Recommended Equipment

Wear appropriate protective equipment (see Section 8).

Personal Precautions

CONTENTS UNDER PRESSURE. Do not puncture or incinerate cans. Keep out of reach of children.

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). See section 12 for Ecological Information.

SECTION 7) HANDLING AND STORAGE

General

Put on appropriate personal protective equipment (see Section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Avoid contact with eyes, skin and clothing. Do not breathe vapor or mist. Do not ingest. Avoid breathing gas. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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 only non-sparking tools. Empty containers retain product residue and can be hazardous.

Ventilation Requirements

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source.

Storage Room Requirements

Store in a cool, dry place away from heat and open flame. Avoid storing at below-freezing temperatures. AEROSOL STORAGE LEVEL I (NFPA-30B) .

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection

Safety glasses to guard against splashing.

Skin Protection

Household type gloves, if desired.

Respiratory Protection

None required if used in a well-ventilated area .

Appropriate Engineering Controls

Use with adequate general or local exhaust ventilation.

Chemical Name	OSHA TWA (ppm)	OSHA TWA (mg/m3)	OSHA STEL (ppm)	OSHA STEL (mg/m3)	OSHA Tables (Z1, Z2, Z3)	OSHA Carcinogen	OSHA Skin designation	NIOSH TWA (ppm)
BUTANE								800
ETHYL ALCOHOL	1000	1900			1			1000
PROPANE	1000	1800			1			1000

Chemical Name	NIOSH TWA (mg/m3)	NIOSH STEL (ppm)	NIOSH STEL (mg/m3)	NIOSH Carcinogen	ACGIH TWA (ppm)	ACGIH TWA (mg/m3)	ACGIH STEL (ppm)	ACGIH STEL (mg/m3)
BUTANE	1900						1000 (EX)	
ETHYL ALCOHOL	1900						1000	
PROPANE	1800						Simple asphyxiant (D), explosion hazard (EX)	

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Density	7.83 lb/gal
Density VOC	4.02 lb/gal
% VOC	51.32%

Appearance	Hazy, yellow liquid
Odor Threshold	N.A.
Odor Description	Citrus scent
pH	10.2 - 11.3
Water Solubility	Complete
Flammability	Temperatures above 120°F may cause cans to burst.
Vapor Pressure	101.3 kPa (20°C)
Flash Point	N.A. This is an aerosol for which Flame Projection is 6-8 inches without flashback.
Viscosity, Kinematic	N.A.
Lower Explosion Level	N.A.
Upper Explosion Level	N.A.
Vapor Density	N.A.
Relative Density	0.93 - 0.94 concentrate
Melting Point/Freezing Point	N.A.
Boiling Point/boiling range	212°F/100°C Water
Decomposition Pt	N.A.
Auto Ignition Temp	N.A.
Evaporation Rate	Faster than butyl acetate

SECTION 10) STABILITY AND REACTIVITY

Stability

Stable.

Conditions to Avoid

Temperatures above 122°F (50°C).

Incompatible Materials

Avoid heat, open flame and contact with strong oxidizers.

Hazardous Reactions/Polymerization

Temperatures above 130 °F may cause cans to burst with force. Hazardous polymerization does not occur.

Hazardous Decomposition Products

Thermal decomposition may yield gases like carbon monoxide and carbon dioxide.

SECTION 11) TOXICOLOGICAL INFORMATION

Skin Corrosion/Irritation

No data available.

Serious Eye Damage/Irritation

Causes serious eye irritation.

Carcinogenicity

Not known chronic effects based on available information.

Germ Cell Mutagenicity

No data available.

Reproductive Toxicity

No data available.

Respiratory/Skin Sensitization

No data available.

Specific Target Organ Toxicity - Single Exposure

No data available.

Specific Target Organ Toxicity - Repeated Exposure

No data available.

Aspiration Hazard

No data available.

Acute Toxicity

No data available.

SECTION 12) ECOLOGICAL INFORMATION

Ecotoxicity

6.1 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical name	Algae/aquatic plants	Fish	Toxicity to Microorganisms	Crustacea
Ethyl alcohol 64-17-5		100: 96 h Pimephales promelas mg/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through 12.0 -16.0: 96 h Oncorhynchus mykiss mL/L LC50 static	EC50 = 34634 mg/L 30 min EC50 = 35470 mg/L 5 min	2: 48 h Daphnia magna mg/L EC50 Static 9268 -14221: 48 h Daphnia magna mg/L LC50 10800: 24 h Daphnia magna mg/L EC50

Persistence and Degradability

No data available.

Bio-Accumulative Potential

See information below.

Chemical name	Partition coefficient
Ethyl alcohol 64-17-5	-0.32
N-Butane 106-97-8	2.89
Propane 74-98-6	2.3

Other Adverse Effects

No data available.

SECTION 13) DISPOSAL CONSIDERATIONS

Waste Disposal

Under RCRA, it is the responsibility of the user of the product, to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state, and local laws.

Do not puncture or incinerate container. If empty: Place in trash or offer for recycling if available. If partly filled: Call your local solid waste agency for disposal instructions. Pressurized container: Do not pierce or burn, even after use.

SECTION 14) TRANSPORT INFORMATION

	U.S. DOT Information	IMDG Information	IATA Information
UN number:	UN1950	UN1950	UN1950
Proper shipping name:	Aerosols	Aerosols	Aerosols, flammable
Hazard class:	2.1	2.1	2.1
Packaging group:	N.A.	N.A.	N.A.
Note / Special Provision:	(LTD QTY)	(LTD QTY)	(LTD QTY)

SECTION 15) REGULATORY INFORMATION

CAS	Chemical Name	% By Weight	Regulation List
0000064-17-5	ETHYL ALCOHOL	25% - 50%	SARA312, VOC,TSCA, ACGIH, OSHA
0000106-97-8	BUTANE	10% - 25%	SARA312, VOC, TSCA, ACGIH
0000074-98-6	PROPANE	1% - 5%	SARA312, VOC,TSCA, ACGIH, OSHA

U.S. EPA Label information

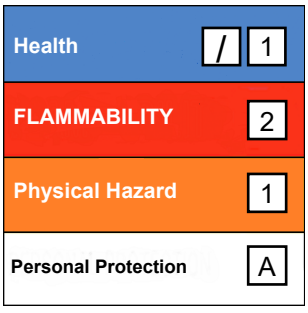
EPA Pesticide registration number 498-179

EPA Statement

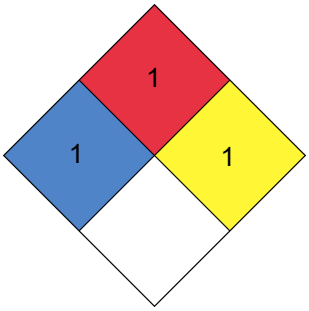
This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label: CAUTION: May cause eye irritation. Avoid contact with the eyes and skin. Avoid breathing of spray mist. Avoid contamination of foodstuff.

SECTION 16) OTHER INFORMATION

HMIS



NFPA



(*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks

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