



Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.09.2023

Page 1 of 15

Revision date: 03.09.2023

Tunnel Senses -Tropical ST

SECTION 1: Identification

Product Identifier

Product Name: Tunnel Senses -Tropical ST

Synonyms: Bubble Gum, Cherry, Candy Cane, Citrus, Fresh Balsam, Grape, Lemon, Pina Colada, Red Hot, Spearmint, Strawberry, Tropical, Vanilla, Fresh and Clean, Island Punch

Product code: ST-102-XX

Recommended Use of the Product and Restriction on Use

Relevant Identified Uses: Not determined or not applicable.

Uses Advised Against: Not determined or not applicable.

Reasons Why Uses Advised Against: Not determined or not applicable.

Manufacturer or Supplier Details

Manufacturer:

United States

JBS Industries

2726 Henkle Drive

Lebanon, Ohio 45036

513-228-2800

SBAETEN@JBSINDUSTRIES.COM

Emergency Telephone Number:

North America

CHEMTREC

800-424-9300 (24 hours)

SECTION 2: Hazard(s) Identification

GHS Classification:

Skin irritation, category 2

Eye irritation, category 2A

Flammable liquids, category 3

Label elements

Hazard Pictograms:



Signal Word: Warning

Hazard statements:

H226 Flammable liquid and vapor

H315 Causes skin irritation

H319 Causes serious eye irritation

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.09.2023

Page 2 of 15

Revision date: 03.09.2023

Tunnel Senses -Tropical ST

Precautionary Statements:

- P264 Wash hands thoroughly after handling.
- P280 Wear protective gloves/protective clothing/eye protection/face protection
- P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking
- P233 Keep container tightly closed
- P240 Ground/bond container and receiving equipment
- P241 Use explosion-proof electrical/ ventilating/ lighting/.../ equipment
- P242 Use only non-sparking tools
- P243 Take precautionary measures against static discharge
- P332+P313 If skin irritation occurs: Get medical advice/attention
- P362 Take off contaminated clothing and wash it before reuse
- 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 advice/attention
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
- P403+P235 Store in a well-ventilated place. Keep cool
- P501 It is the responsibility of the waste generator to characterize all waste material according to regulatory entities.

Hazards Not Otherwise Classified: None

SECTION 3: Composition/Information on Ingredients

Identification	Name	Weight %
CAS Number: 68439-46-3	Alcohols, C9-11, branched and linear, ethoxylated	<10
CAS Number: 111-76-2	2-Butoxyethanol	<10
CAS Number: 1300-72-7	Sodium Xylenesulfonate	<10
CAS Number: 75-21-8	Ethylene oxide	<0.01
CAS Number: 123-91-1	1,4-dioxane	<0.01
CAS Number: 107-21-1	Ethane-1,2-diol	<5

Additional Information: None

SECTION 4: First Aid Measures

Description of First Aid Measures

General Notes:

Show this Safety Data Sheet to the doctor in attendance.

After Inhalation:

If inhaled, remove person to fresh air and place in a position comfortable for breathing. Keep person at rest. If breathing is difficult, administer oxygen. If breathing has stopped, provide artificial respiration. If experiencing respiratory symptoms, seek medical advice/attention.

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.09.2023

Page 3 of 15

Revision date: 03.09.2023

Tunnel Senses -Tropical ST

After Skin Contact:

Remove contaminated clothing and shoes. Rinse skin with copious amounts of water [shower] for several minutes. Launder contaminated clothing before reuse. If symptoms develop or persist, seek medical advice/attention.

After Eye Contact:

Rinse eyes with plenty of water for several minutes. Remove contact lenses if present and easy to do so. Protect unexposed eye. If symptoms develop or persist, seek medical advice/attention.

After Swallowing:

If swallowed, DO NOT induce vomiting unless told to do so by a physician or poison control center. Rinse mouth with water. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs, place on the left side with head down to prevent aspiration of liquid into the lungs. If symptoms develop or persist, seek medical advice/attention.

Most Important Symptoms and Effects, Both Acute and Delayed

Acute Symptoms and Effects:

Skin contact may result in redness, pain, burning and inflammation.

Eye contact may result in irritation, redness, pain, inflammation, itching, burning and tearing.

Product is flammable. Exposure to sources of ignition may cause physical injury.

Delayed Symptoms and Effects:

Effects are dependent on exposure (dose, concentration, contact time).

Immediate Medical Attention and Special Treatment

Specific Treatment:

Skin/eye burns require immediate treatment.

Notes for the Doctor:

Treat symptomatically.

SECTION 5: Firefighting Measures

Extinguishing Media

Suitable Extinguishing Media:

Water mist/fog, carbon dioxide, dry chemical or alcohol resistant foam.

Unsuitable Extinguishing Media:

Do not use water jet.

Specific Hazards During Fire-Fighting:

Flammable liquid. Will be easily ignitable by heat, sparks or flames. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapor explosion hazard indoors, outdoors or in sewers. Runoff to sewer may create fire or explosion hazard. Containers may explode when heated. Inhalation or contact with material may irritate or burn skin and eyes. Fire may produce irritating, corrosive and/or toxic gases. Vapors may cause dizziness or suffocation.

Special Protective Equipment for Firefighters:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full-face piece operated in positive pressure mode.

Special precautions:

Evacuate non-essential personnel. Ventilate closed spaces before entering. Consider initial evacuation for 300 meters in all directions. If tank/rail car is involved in the fire, ISOLATE for 800 meters in all directions. Fight fire from a maximum distance. Move containers from fire area if you can do it without risk. Use water spray/fog for cooling fire exposed containers. Withdraw immediately in case of rising sound from venting

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.09.2023

Page 4 of 15

Revision date: 03.09.2023

Tunnel Senses -Tropical ST

safety devices or discoloration of tank. Always stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles. If this is impossible, withdraw from area and let fire burn. Stand by, at a safe distance, with extinguisher ready for possible re-ignition. A vapor-suppressing foam may be used to reduce vapors. Avoid unnecessary run-off of extinguishing media which may cause pollution. Do not handle damaged containers unless specialized to do so.

SECTION 6: Accidental Release Measures

Personal Precautions, Protective Equipment, and Emergency Procedures:

Evacuate unnecessary personnel. Ventilate area. Extinguish any sources of ignition. All equipment used when handling the product must be grounded. Wear recommended personal protective equipment (see Section 8). Avoid contact with skin, eyes and clothing. Avoid breathing mist, vapor, dust, fume and spray. Do not walk through spilled material. Wash thoroughly after handling.

Environmental Precautions:

Prevent further leakage or spillage if safe to do so. Prevent from reaching drains, sewers and waterways. Discharge into the environment must be avoided.

Methods and Material for Containment and Cleaning Up:

Do not touch damaged containers or spilled material unless wearing appropriate personal protective clothing. Stop leak if you can do it without risk. Contain and collect spillage and place in suitable container for future disposal. Dispose of in accordance with all applicable regulations (see Section 13).

Reference to Other Sections:

For personal protective equipment see Section 8. For disposal see Section 13.

SECTION 7: Handling and Storage

Precautions for Safe Handling:

Use appropriate personal protective equipment (see Section 8). Use only with adequate ventilation. Avoid breathing mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling chemical substances. Avoid contact with skin, eyes and clothing. Wash affected areas thoroughly after handling. Keep away from incompatible materials (See Section 10). Keep containers tightly closed when not in use.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating and lighting equipment. Take action to prevent static discharges. Handle containers with caution. Use appropriate personal protective equipment (see Section 8). Use only with adequate ventilation. Avoid breathing mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling chemical substances. Avoid contact with skin, eyes and clothing. Wash affected areas thoroughly after handling. Keep away from incompatible materials (See Section 10). Keep containers tightly closed when not in use.

Conditions for Safe Storage, Including Any Incompatibilities:

Store in cool, dry, well-ventilated location out of direct sunlight. Keep away from food and beverages. Protect from freezing and physical damage. Store away from heat, open flames and other sources of ignition. Keep container tightly sealed. Store away from incompatible materials (See Section 10).

SECTION 8: Exposure Controls/Personal Protection

Only those substances with limit values have been included below.

Occupational Exposure Limit Values:

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.09.2023

Page 5 of 15

Revision date: 03.09.2023

Tunnel Senses -Tropical ST

Country (Legal Basis)	Substance	Identifier	Permissible concentration
ACGIH	Ethane-1,2-diol	107-21-1	8-Hour TWA: 25 ppm (vapor fraction)
	Ethane-1,2-diol	107-21-1	15-Minute STEL: 50 ppm (vapor fraction)
	Ethane-1,2-diol	107-21-1	15-Minute STEL: 10 mg/m ³ (aerosol only, inhalable fraction)
	2-Butoxyethanol	111-76-2	8-Hour TWA: 20 ppm
	Ethylene oxide	75-21-8	TWA: 1 ppm
	1,4-dioxane	123-91-1	TLV-TWA: 20 ppm (8 hr)
OSHA	2-Butoxyethanol	111-76-2	8-Hour TWA-PEL: 240 mg/m ³ (50 ppm)
	Ethane-1,2-diol	107-21-1	Ceiling Limit: 125 mg/m ³ (50 ppm)
	Ethylene oxide	75-21-8	TWA: 1 ppm
	Ethylene oxide	75-21-8	STEL: 5 ppm
	1,4-dioxane	123-91-1	8-Hour TWA-PEL: 360 mg/m ³ (100 ppm [Table Z-1])
	1,4-dioxane	123-91-1	TWA: 90 mg/m ³ (25 ppm [Table Z-1-A])
NIOSH	2-Butoxyethanol	111-76-2	IDLH: 700 ppm
	2-Butoxyethanol	111-76-2	REL-TWA: 24 mg/m ³ (5 ppm [up to 10 hr])
	Ethylene oxide	75-21-8	IDLH: 800 ppm
	Ethylene oxide	75-21-8	Ceiling Limit: 9 mg/m ³ (5 ppm [10-min/day])
	Ethylene oxide	75-21-8	REL: 0.18 mg/m ³ (0.1 ppm)
	1,4-dioxane	123-91-1	Ceiling Limit: 3.6 mg/m ³ (1 ppm [30-min])
	1,4-dioxane	123-91-1	IDLH: 500 ppm
United States(California)	2-Butoxyethanol	111-76-2	8-Hour TWA-PEL: 97 mg/m ³ (20 ppm)
	Ethane-1,2-diol	107-21-1	Ceiling Limit: 100 mg/m ³ (40 ppm)
	Ethane-1,2-diol	107-21-1	REL: 400 ug/m ³ (Chronic Inhalation)
	Ethylene oxide	75-21-8	STEL: 5 ppm
	Ethylene oxide	75-21-8	PEL: 2 mg/m ³ (1 ppm)
	Ethylene oxide	75-21-8	REL: 0.03 mg/m ³ (Chronic inhalation)
	1,4-dioxane	123-91-1	8-Hour TWA-PEL: 1 mg/m ³ (0.28 ppm)
	1,4-dioxane	123-91-1	REL: 3000 ug/m ³ ([8 hr]; Acute inhalation)
	1,4-dioxane	123-91-1	REL: 3000 ug/m ³ ([8 hr]; Chronic inhalation)

Biological Limit Values:

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.09.2023

Page 6 of 15

Revision date: 03.09.2023

Tunnel Senses -Tropical ST

Country (Legal Basis)	Substance	Identifier	Determinant	Specimen	Sampling time	Permissible limits
ACGIH	2-Butoxyethanol	111-76-2	Butoxyacetic acid (with hydrolysis)	Creatinine in Urine	End of shift	200 mg/g
	Ethylene oxide	75-21-8	N-(2-hydroxyethyl)-valine (HEV) hemoglobin adducts	Hemoglobin adducts	Not critical	5000 pmol/g
	Ethylene oxide	75-21-8	S-(2-hydroxyethyl) mercapturic acid (HEMA)	Creatinine in urine	End of shift	5 µg/g

Information on Monitoring Procedures:

Not determined or not applicable.

Appropriate Engineering Controls:

Emergency eye wash stations and safety showers should be available in the immediate vicinity of use or handling. Provide adequate ventilation to maintain the airborne concentrations of vapor, mists, and/or dusts below the applicable workplace exposure limits, while observing recognized national standards (or equivalent).

Personal Protection Equipment

Eye and Face Protection:

Safety glasses or goggles. Use eye protection equipment that has been tested and approved by recognized national standards (or equivalent).

Skin and Body Protection:

Chemical resistant, impervious gloves approved by the appropriate standards. Gloves must be inspected prior to use. Avoid skin contact with used gloves. Appropriate techniques should be used to remove used gloves and contaminated clothing. 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. Ensure that all personal protective equipment is approved by recognized national standards (or equivalent).

Respiratory Protection:

If engineering controls do not maintain airborne concentrations below the applicable workplace exposure limits, or to an acceptable level (if exposure limits have not been established), a respirator approved by recognized national standards (or equivalent) must be worn.

General Hygienic Measures:

When handling chemical products, do not eat, drink or smoke. Wash hands after handling, before breaks, and at the end of the workday. Avoid contact with skin, eyes and clothing. Wash contaminated clothing before reuse. Perform routine housekeeping.

SECTION 9: Physical and Chemical Properties

Information on Basic Physical and Chemical Properties

Appearance	Liquid
Odor	Std.
Odor threshold	Not determined or not available.
pH	7
Melting point/freezing point	Not determined or not available.
Initial boiling point/range	Not determined or not available.
Flash point (closed cup)	Not determined or not available.

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.09.2023

Page 7 of 15

Revision date: 03.09.2023

Tunnel Senses -Tropical ST

Evaporation rate	Not determined or not available.
Flammability (solid, gas)	Not determined or not available.
Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Vapor pressure	Not determined or not available.
Vapor density	Not determined or not available.
Density	Not determined or not available.
Relative density	Not determined or not available.
Solubilities	Not determined or not available.
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.
Dynamic viscosity	Not determined or not available.
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

SECTION 10: Stability and Reactivity

Reactivity:

Not reactive under recommended handling and storage conditions.

Chemical Stability:

Stable under recommended handling and storage conditions.

Possibility of Hazardous Reactions:

Hazardous reactions are not anticipated under recommended conditions of handling and storage.

Conditions to Avoid:

Extreme heat, open flames, hot surfaces, sparks, ignition sources and incompatible materials.

Extreme heat, open flames, hot surfaces, sparks, ignition sources, static electricity and incompatible materials. Vapor accumulation in low or confined areas.

Incompatible Materials:

None known.

Hazardous Decomposition Products:

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological Information

Acute Toxicity

Assessment: Based on available data, the classification criteria are not met.

Product Data: No data available.

Substance Data:

Name	Route	Result
2-Butoxyethanol	dermal	LD50 Rabbit: 1060 mg/kg
	Oral ATE	LD50 Rat: 1200 mg/kg (Annex VI to the CLP)
	oral	LD50 Rat: 470 mg/kg
	Inhalation ATE	LC50 Rat: 11 mg/L (4 hr [Vapor])

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.09.2023

Page 8 of 15

Revision date: 03.09.2023

Tunnel Senses -Tropical ST

Name	Route	Result
Ethane-1,2-diol	dermal	LD50 Mouse: > 3500 mg/kg
	Oral ATE	LD50 Rat: 500 mg/kg (Converted acute toxicity point estimate)
Sodium Xylenesulfonate	dermal	LD50 Rabbit: >= 2000 mg/kg
	oral	LD50 Rat: >= 3346 mg/kg
Ethylene oxide	Inhalation ATE	LC50 Rat: 700 ppmV ((Gases))
	Oral ATE	LD50 Rat: 100 mg/kg
1,4-dioxane	oral	LD50 Rat: 5150 mg/kg
	dermal	LD50 Rabbit: 7600 mg/kg
	inhalation	LC50 Rat: 9158 ppmV (4 hr [vapor])
Alcohols, C9-11, branched and linear, ethoxylated	oral	LD50 Rat: 1378 mg/kg
	dermal	LD50 Rabbit: > 2000 mg/kg
	inhalation	LC50 Rat: >100 mg/m ³ (6 hr [Vapor; read-across])

Skin Corrosion/Irritation

Assessment:

Causes skin irritation.

Product Data:

No data available.

Substance Data:

Name	Result
2-Butoxyethanol	Causes skin irritation.
Ethylene oxide	Causes severe skin burns.

Serious Eye Damage/Irritation

Assessment:

Causes serious eye irritation.

Product Data:

No data available.

Substance Data:

Name	Result
Sodium Xylenesulfonate	Causes serious eye irritation.
2-Butoxyethanol	Causes serious eye irritation.
Ethylene oxide	Causes serious eye damage.
1,4-dioxane	Causes serious eye irritation.
Alcohols, C9-11, branched and linear, ethoxylated	Causes serious eye damage.

Respiratory or Skin Sensitization

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available.

Substance Data: No data available.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.09.2023

Page 9 of 15

Revision date: 03.09.2023

Tunnel Senses -Tropical ST

Product Data: No data available.

Substance Data:

Name	Species	Result
Ethylene oxide		May cause cancer.
1,4-dioxane		May cause cancer. This substance is characterized as "likely to be carcinogenic to humans." This characterization is based on the following findings: (1) inadequate evidence of carcinogenicity in humans, and (2) sufficient evidence in animals (i.e., hepatic tumors in multiple species [three strains of rats, two strains of mouse, and in guinea pigs] mesotheliomas of the peritoneum, mammary, and nasal tumors have also been observed in rats following 2 years of oral exposure to this substance). U.S. Environmental Protection Agency's Integrated Risk Information System (IRIS).

International Agency for Research on Cancer (IARC):

Name	Classification
Ethane-1,2-diol	Not Applicable
	Not Applicable
Sodium Xylenesulfonate	Not Applicable
2-Butoxyethanol	Group 3
Ethylene oxide	Group 1
1,4-dioxane	Group 2B
Alcohols, C9-11, branched and linear, ethoxylated	Not Applicable

National Toxicology Program (NTP):

Name	Classification
Ethane-1,2-diol	Not Applicable
	Not Applicable
Sodium Xylenesulfonate	Not Applicable
2-Butoxyethanol	Not Applicable
Ethylene oxide	Known to be human carcinogens
1,4-dioxane	Reasonably anticipated to be human carcinogens
Alcohols, C9-11, branched and linear, ethoxylated	Not Applicable

OSHA Carcinogens: Not applicable

Germ Cell Mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available.

Substance Data:

Name	Result
Ethylene oxide	May cause genetic defects.

Reproductive Toxicity

Assessment: Based on available data, the classification criteria are not met.

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.09.2023

Page 10 of 15

Revision date: 03.09.2023

Tunnel Senses -Tropical ST

Product Data:

No data available.

Substance Data:

Name	Result
Ethylene oxide	May damage fertility. Suspected of damaging the unborn child.

Specific Target Organ Toxicity (Single Exposure)

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available.

Substance Data:

Name	Result
Ethylene oxide	May cause respiratory irritation.
	May cause drowsiness or dizziness.
1,4-dioxane	May cause respiratory irritation.

Specific Target Organ Toxicity (Repeated Exposure)

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available.

Substance Data:

Name	Result
Ethane-1,2-diol	May cause damage to Kidneys through prolonged or repeated Oral exposure.
Ethylene oxide	Studies on the effects of Ethylene oxide have concluded not only neurotoxic symptoms in humans, but also measured effects on nerve conduction velocities indicative of sensorimotor neuropathy, and axonal degeneration observed in nerve biopsies of exposed workers.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available.

Substance Data: No data available.

Information on Likely Routes of Exposure:

No data available.

Symptoms Related to the Physical, Chemical, and Toxicological Characteristics:

No data available.

Other Information:

No data available.

SECTION 12: Ecological Information

Acute (Short-Term) Toxicity

Assessment: Based on available data, the classification criteria are not met.

Product Data: No data available.

Substance Data:

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.09.2023

Page 11 of 15

Revision date: 03.09.2023

Tunnel Senses -Tropical ST

Name	Result
Ethane-1,2-diol	Aquatic Plants EC50 Raphidocelis subcapitata: 6500 - 13,000 mg/L (96 hr [growth rate])
	Aquatic Invertebrates EC50 Daphnia magna: > 100 mg/L (48 hr)
	Fish LC50 Pimephales promelas: 72,860 mg/L (96 hr)
2-Butoxyethanol	Aquatic Invertebrates EC50 Daphnia magna: 1550 mg/L (48 hr [mobility])
	Fish LC50 Oncorhynchus mykiss: 1474 mg/L (96 hr)
	Aquatic Plants EC50 Freshwater algae: 1840 mg/L (72 hr [growth rate])
Sodium Xylenesulfonate	Aquatic Plants EC50 Selenastrum capricornutum: >=758 mg/L (96 hr [growth rate; read-across])
	Fish LC50 Oncorhynchus mykiss: >=1580 mg/L (96 hr [read-across])
	Aquatic Invertebrates EC50 Daphnia magna: >1020 mg/L (48 hr [mobility; read-across])
Ethylene oxide	Aquatic Plants EC50 Pseudokirchneriella subcapitata: 240 mg/L (96 h, read-across substance data)
	Aquatic Invertebrates LC50 Daphnia magna: 212 mg/L (48 h)
	Fish LC50 Pimephales promelas: 84 mg/L (96 h)
1,4-dioxane	Fish LC50 Pimephales promelas: 9850 mg/L (96 hr)
	Aquatic Invertebrates EC50 Daphnia magna: >1000 mg/L (48 hr)
	Aquatic Plants EC50 Pseudokirchneriella subcapitata: >1000 mg/L (72 hr)
Alcohols, C9-11, branched and linear, ethoxylated	Fish LC50 Oncorhynchus mykiss: 5 mg/L (96 hr)
	Aquatic Invertebrates EC50 Daphnia magna: 2.5 mg/L (48 hr)
	Aquatic Plants ErC50 Selenastrum capricornutum: 1.4 mg/L (96 hr)

Chronic (Long-Term) Toxicity

Assessment: Based on available data, the classification criteria are not met.

Product Data: No data available.

Substance Data:

Name	Result
Ethane-1,2-diol	Fish NOEC Menidia peninsulae: > 40 mg/L (28 d [mortality])
	Aquatic Invertebrates NOEC Daphnia magna: > 15,000 mg/L (21 d [reproduction])
2-Butoxyethanol	Fish LC50 Poecilia reticulata: 983 mg/L (7 d)
	Aquatic Invertebrates EC50 Daphnia magna: 297 mg/L (21 d [reproduction])
1,4-dioxane	Aquatic Plants NOEC Pseudokirchneriella subcapitata: 580 mg/L (72 hr)
	Fish NOEC Pimephales promelas: 145 mg/L (32 d)
	Aquatic Invertebrates NOEC Daphnia magna: 1000 mg/L (21 d)
Alcohols, C9-11, branched and linear, ethoxylated	Fish NOEC Lepomis macrochirus: > 0.33 mg/L (30 d)
	Aquatic Invertebrates NOEC Daphnia magna: 0.77 mg/L (21 d)

Persistence and Degradability

Product Data: No data available.

Substance Data:

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.09.2023

Page 12 of 15

Revision date: 03.09.2023

Tunnel Senses -Tropical ST

Name	Result
Ethane-1,2-diol	Substance is readily biodegradable (90-100% degradation after 10 days in water by DOC removal).
2-Butoxyethanol	Readily biodegradable (90.4% degradation after 28 days, measured by CO2 evolution).
Sodium Xylenesulfonate	The substance is readily biodegradable. 83 - 85% degradation, measured by CO2 evolution, after 28 days.
Ethylene oxide	Readily biodegradable (96% degradation after 28 days, measured by TOC removal).
1,4-dioxane	Not readily biodegradable (< 10 % degradation after 29 days).
Alcohols, C9-11, branched and linear, ethoxylated	The substance is readily biodegradable. 70 - 100% degradation in water, measured by CO2 evolution, after 28 days.

Bioaccumulative Potential

Product Data: No data available.

Substance Data:

Name	Result
Ethane-1,2-diol	Bioaccumulation in organisms is not to be expected (log Kow: -1.36).
2-Butoxyethanol	Not expected to bioaccumulate (log Kow = 0.83).
Ethylene oxide	Low potential for bioaccumulation (logKow = -0.3).
1,4-dioxane	Does not accumulate in aquatic organisms (mean BCF: 0.45).
Alcohols, C9-11, branched and linear, ethoxylated	The substance has low potential for bioaccumulation. Bioaccumulation in organisms is negligible, due to biotransformation and excretion of alcohol ethoxylates. BCF: 237 L/kg

Mobility in Soil

Product Data: No data available.

Substance Data:

Name	Result
Ethane-1,2-diol	Adsorption to the solid soil phase is not expected.
1,4-dioxane	Significant adsorption to solid soil phase is not expected (calculated log Koc: 0.51 at 25 °C).
Alcohols, C9-11, branched and linear, ethoxylated	Moderately mobile (log Koc: 1.575 - 2.365).

Results of PBT and vPvB assessment

Product Data:

PBT assessment: This product does not contain any substances that are assessed to be a PBT.

vPvB assessment: This product does not contain any substances that are assessed to be a vPvB.

Substance Data:

PBT assessment:

2-Butoxyethanol	The substance is not PBT.
Ethane-1,2-diol	The substance is not PBT.
Sodium Xylenesulfonate	The substance is not PBT.
Ethylene oxide	This substance is not PBT.
1,4-dioxane	This substance is not PBT.
Alcohols, C9-11, branched and linear, ethoxylated	The substance is not PBT.

vPvB assessment:

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.09.2023

Page 13 of 15

Revision date: 03.09.2023

Tunnel Senses -Tropical ST

2-Butoxyethanol	The substance is not vPvB.
Ethane-1,2-diol	The substance is not vPvB.
Sodium Xylenesulfonate	The substance is not vPvB.
Ethylene oxide	This substance is not vPvB.
1,4-dioxane	This substance is not vPvB.
Alcohols, C9-11, branched and linear, ethoxylated	The substance is not vPvB.

Other Adverse Effects: No data available.

SECTION 13: Disposal Considerations

Disposal Methods:

It is the responsibility of the waste generator to characterize all waste material according to regulatory entities.

Contaminated packages:

Not determined or not applicable.

SECTION 14: Transport Information

United States Transportation of Dangerous Goods (49 CFR DOT)

UN Number	Not regulated
UN Proper Shipping Name	Not regulated
UN Transport Hazard Class(es)	None
Packing Group	None
Environmental Hazards	None
Special Precautions for User	None

International Maritime Dangerous Goods (IMDG)

UN Number	Not regulated
UN Proper Shipping Name	Not regulated
UN Transport Hazard Class(es)	None
Packing Group	None
Environmental Hazards	None
Special Precautions for User	None

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN Number	Not regulated
UN Proper Shipping Name	Not regulated
UN Transport Hazard Class(es)	None
Packing Group	None
Environmental Hazards	None
Special Precautions for User	None

SECTION 15: Regulatory Information

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.09.2023

Page 14 of 15

Revision date: 03.09.2023

Tunnel Senses -Tropical ST

United States Regulations

Inventory Listing (TSCA): All ingredients are listed-active or exempt.

Significant New Use Rule (TSCA Section 5): None of the ingredients are listed.

Export Notification under TSCA Section 12(b): None of the ingredients are listed.

SARA Section 302 Extremely Hazardous Substances:

75-21-8	Ethylene oxide	Listed
---------	----------------	--------

SARA Section 313 Toxic Chemicals:

107-21-1	Ethane-1,2-diol	Listed
111-76-2	2-Butoxyethanol	Listed
75-21-8	Ethylene oxide	Listed
123-91-1	1,4-dioxane	Listed

CERCLA:

107-21-1	Ethane-1,2-diol	Listed	5000 lb
111-76-2	2-Butoxyethanol	Listed	N/A
75-21-8	Ethylene oxide	Listed	10 lbs
123-91-1	1,4-dioxane	Listed	100 lbs

RCRA:

75-21-8	Ethylene oxide	Listed	U115
123-91-1	1,4-dioxane	Listed	U108

Section 112(r) of the Clean Air Act (CAA):

75-21-8	Ethylene oxide	Listed
---------	----------------	--------

Massachusetts Right to Know:

107-21-1	Ethane-1,2-diol	Listed
111-76-2	2-Butoxyethanol	Listed
75-21-8	Ethylene oxide	Listed
123-91-1	1,4-dioxane	Listed

New Jersey Right to Know:

107-21-1	Ethane-1,2-diol	Listed
111-76-2	2-Butoxyethanol	Listed
75-21-8	Ethylene oxide	Listed
123-91-1	1,4-dioxane	Listed

New York Right to Know:

107-21-1	Ethane-1,2-diol	Listed
111-76-2	2-Butoxyethanol	Listed
75-21-8	Ethylene oxide	Listed
123-91-1	1,4-dioxane	Listed

Pennsylvania Right to Know:

107-21-1	Ethane-1,2-diol	Listed
111-76-2	2-Butoxyethanol	Listed
75-21-8	Ethylene oxide	Listed
123-91-1	1,4-dioxane	Listed

California Proposition 65:

⚠️WARNING: This product can expose you to 1,4-dioxane; which is known to the State of California to

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.09.2023

Page 15 of 15

Revision date: 03.09.2023

Tunnel Senses -Tropical ST

cause cancer; and Ethane-1,2-diol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

⚠️WARNING: This product can expose you to Ethylene oxide; which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Additional information: Not determined.

SECTION 16: Other Information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with OSHA HCS 2012 guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

NFPA: 0-0-0

HMIS: 0-0-0

Initial Preparation Date: 03.09.2023

End of Safety Data Sheet