



SAFETY DATA SHEET

Preparation Date: 06/23/2015 Revision Date: 12/19/2017 Revision Number: G2

1. IDENTIFICATION

Product identifier

Product code: B-297

Product Name: BROMOCRESOL GREEN TS, (U.S.P. TEST SOLUTION)

Other means of identification

Synonyms: No information available

CAS #: Mixture
RTECS # Not available
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use:
Uses advised against
No information available.
No information available

<u>Supplier:</u> Spectrum Chemical Mfg. Corp

14422 South San Pedro St. Gardena, CA 90248

(310) 516-8000

Order Online At: https://www.spectrumchemical.com

Emergency telephone numberChemtrec 1-800-424-9300Contact Person:Martin LaBenz (West Coast)Contact Person:Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous according to the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Serious eye damage/eye irritation	Category 2
Reproductive toxicity	Category 1B
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 1
Flammable liquids	Category 2

Label elements

Danger

Hazard statements

Causes serious eye irritation

May damage fertility or the unborn child

May cause respiratory irritation. May cause drowsiness or dizziness Causes damage to organs through prolonged or repeated exposure

Highly flammable liquid and vapor

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Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Can burn with an invisible flame

Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Wash face, hands and any exposed skin thoroughly after handling

Do not breathe dust/fume/gas/mist/vapors/spray

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/.../equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Keep cool

Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

In case of fire: Use CO2, dry chemical, or foam to extinguish.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Precautionary Statements - Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Ethyl Alcohol 200 proof	64-17-5	94.95
Water	7732-18-5	5
Bromocresol Green	76-60-8	0.05

4. FIRST AID MEASURES

First aid measures

General Advice: National Capital Poison Center in the United States can provide assistance if you

have a poison emergency and need to talk to a poison specialist. Call

1-800-222-1222.

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Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothing and

shoes. Get medical attention. If skin irritation persists, call a physician.

Eye Contact: Flush eyes with water for 15 minutes. Get medical attention.

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give

oxygen. Get medical attention.

Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an

unconscious person. Consult a physician if necessary.

Most important symptoms and effects, both acute and delayed

Symptoms Causes serious eye irritation

Dizziness Drowsiness

May cause irritation of respiratory tract

Causes damage to organs through prolonged or repeated exposure

May damage fertility or the unborn child

Causes eye irritation May cause skin irritation

Dyspnea (Difficulty breathing and shortness of breath)

Central nervous system effects Headache

Ataxia
Staggering gait

Nausea Vomiting

May cause cardiovascular effects

Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically.

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Carbon dioxide (CO2). Dry chemical. Alcohol-resistant

foam. Water spray.

Unsuitable Extinguishing Media:Do not use a solid (straight) water stream as it may scatter

and spread fire.

Specific hazards arising from the chemical

Hazardous Combustion Products: Carbon oxides

Hazardous Combustion Products: No information available.

Specific hazards: Flammable. Material can burn with invisible flame. May be

ignited by heat, sparks or flames. Container explosion may occur under fire conditions or when heated. Vapor may travel considerable distance to source of ignition and flash back. Vapors may form explosive mixtures with air. Most vapors are heavier than air. They will spread along the ground and collect in low or confined areas (sewers,

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basements, tanks). Ethanol has an explosive reaction with

the oxidized coating around potassium metal.

Ethanol ignites and then explodes on contact with acetic anhydride + sodium hydrosulfate (ignites and may explode), disulfuric acid + nitric acid, phosphorous(III) oxide platinum, potassium-tert-butoxide+ acids. Ethanol forms explosive products in reaction with the following compound: ammonia + silver nitrate (forms silver nitride and silver fulminate), iodine + phosphorus (forms ethane iodide), magnesium perchlorate (forms ethyl perchlorate), mercuric nitrate, nitric acid + silver (forms silver fulminate) silver nitrate (forms ethyl nitrate) silver(I)

oxide + ammonia or hydrazine (forms silver nitride and silver fulminate), sodium (evolves hydrogen gas).

Special Protective Actions for Firefighters

Specific Methods: Water mist may be used to cool closed containers. For

larger fires, use water spray or fog. Cool containers with flooding quantities of water until well after fire is out. Dike fire-control water for later disposal; do not scatter the

material.

Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus

pressure-demand, MSHA/NIOSH (approved or equivalent)

and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid

contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition. Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use

spark-proof tools and explosion-proof equipment. In case of large spill, water spray or vapor suppressing foam may be used to reduce vapors, but may not prevent ignition in closed

spaces.

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering

drains. Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Absorb spill with inert material (e.g.

vermiculite, dry sand or earth). In case of large spill, dike if needed. Dike far

ahead of liquid spill for later disposal.

Methods for cleaning up

Use appropriate tools to put the spilled material in a suitable chemical waste

disposal container. Use only non-sparking tools. Clean contaminated surface

thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Remove all sources of ignition. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from incompatible materials.

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Safe Handling Advice

Wear personal protective equipment. Use only in well-ventilated areas. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Do not breathe vapors or spray mist. Do not ingest. When using do not smoke. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials. Keep away from heat and sources of ignition.

Incompatible Materials:

Oxidizing agents Acids Alkali Metals Bases Metals Acid anhydrides Acid chlorides isocyanates

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WEEL
Ethyl Alcohol 200 proof	64-17-5	1000 ppm TWA 1900 mg/m³ TWA	1000 ppm TWA 1900 mg/m³ TWA	1000 ppm STEL	None
Water	7732-18-5	None	None	None	None
Bromocresol Green	76-60-8	None	None	None	None

Canada

Components	CAS-No.	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Ethyl Alcohol 200 proof	64-17-5	1000 ppm TWA 1880 mg/m³ TWA	1000 ppm STEL	1000 ppm STEL	1000 ppm TWAEV 1880 mg/m³ TWAEV
Water	7732-18-5	None	None	None	None
Bromocresol Green	76-60-8	None	None	None	None

Australia and Mexico

Components	CAS-No.	Australia	Mexico
Ethyl Alcohol 200 proof	64-17-5	1000 ppm TWA 1880 mg/m³ TWA	1000 ppm TWA 1900 mg/m³ TWA
Water	7732-18-5	None	None
Bromocresol Green	76-60-8	None	None

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

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Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection: Goggles Safety glasses with side-shields

Skin and body protection: Chemical resistant apron

Gloves

Long sleeved clothing

Respiratory protection: Vapor respirator. Be sure to use an approved/certified respirator or equivalent.

Avoid contact with skin, eyes and clothing. Wash hands before breaks and Hygiene measures:

immediately after handling the product. When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Appearance: Color:

No information available. No information available. Liquid

Formula: Odor: Taste

No information available. No information available. No information available

Molecular/Formula weight: Flammability: Flashpoint (°C/°F):

No information available Highly flammable liquid and vapor The lowest known value is CLOSED CUP: 12.78°C/55°F, OPEN CUP: 15.8-18°C/60.44-64.4°F (Ethyl Alcohol

200 Proof)

Flash Point Tested according to:

Autoignition Temperature (°C/°F): Closed cup

The lowest known value is 3.3 (Ethyl alcohol 200 proof)

363°C/685.4°F (Ethyl alcohol 200 proof)

Decomposition temperature(°C/°F): Upper Explosion Limit (%): Melting point/range(°C/°F):

19 (Ethyl alcohol 200 proof) May start to solidify at No information available

-114.1°C/-173.4°F based on data for:

Ethyl alcohol 200 proof

Boiling point/range(°C/°F): **Bulk density:** Density (g/cm3):

The lowest known value is No information available No information available 78.5°C/173.3°F (Ethyl alcohol 200

proof). Weighted average:

79.57°C/175.2°F

Open cup

Specific gravity: Vapor pressure @ 20°C (kPa): :Ha

Weighted average: 0.8 No information available The highest known value is 5.7 kPa (Ethyl alcohol 200 proof). Weighted

average: 5.53 kPa

Lower Explosion Limit (%):

VOC content (g/L): **Evaporation rate:** Vapor density:

The highest known value is 1.59 (Ethyl No information available No information available alcohol 200 proof). Weighted average:

1.54

Odor threshold (ppm): Partition coefficient Viscosity:

No information available The highest known value is 100 ppm (n-octanol/water):

(Ethyl alcohol 200 proof) No information available

Solubility: Miscibility:

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No information available Easily soluble in cold water

Easily soluble in hot water Soluble in Acetone Soluble in diethyl ether Soluble in Methanol

Soluble III Wellianoi

10. STABILITY AND REACTIVITY

Reactivity

For Ethyl alcohol:

When Ethanol comes in contact with Sodium, it liberates flammable hydrogen gas

It can react vigorously or explosively with acid hydrides or acid chlorides

It reacts with alkali metals to liberate flammable hydrogen gas

It reacts with acetyl bromide to evolve hydrogen bromide

It reacts with ammonia + silver nitrate to form silver nitride and silver fulminate

Ethyl Alcohol reacts vigorously with acetyl chloride.

Ethyl alcohol reacts with silver (I) oxide + ammonia or hydrazine to form silver nitride and silver fulminate

Ethanol ignites and then explodes on contact with the following compounds: acetic anhydride + sodium hydrosulfate, disulfuric acid + nitric acid, phosphorus (III) oxide, platinum, potassium tert-butoxide + acids

Ethanol rapidly absorbs moisture from the air. Can react vigorously/explosively with oxidizers. Ethanol can react vigorously/explosively with the following: ammonium hydroxide & silver oxide, chlorine or chlorine oxides, perchlorates (barium perchlorate, chloryl perchlorate, magnesium perchlorate (forms ethyl perchlorate), nitrosyl perchlorate, potassium perchlorate, silver perchlorate, uranyl perchlorate), acetic anhydride, acetyl bromide (evolves hydrogen bromide), acetyl chloride, aluminum sesquibromide ethylate, bromine pentafluoride, calcium hypochlorite, chromic anhydride, , chromium trioxide, chromyl chloride, cyanuric acid + water, dichloromethane + sulfuric acid + nitrate (or) nitrite, manganese perchlorate + 2,2-dimethoxy propane, dioxygen difluoride, disulfuryl difluoride, fluorine nitrate, hydrogen peroxide, iodine heptafluoride, manganese heptoxide, iodine + methanol + mercuric oxide, iodine + Phosphorus (forms ethane iodide), mercuric nitrate, nitric acid, perchloric acid, permanganic acid, peroxodisulfuric acid, platinum black, potassium dioxide, potassium permanganate, potassium superoxide, potassium tert-butoxide, ruthenium(VIII) oxide, silver +nitric acid (forms silver fulminate), silver nitrate (forms ethyl nitrate), silver peroxide, sodium hydrazide, hydrogen peroxide + sulfuric acid, sulfuric acid + permanganates, uranium hexafluoride, sulfuric acid + sodium dichromate, tetrachlorisilane + water, silver & nitric acid, tetraphosphorus hexaoxide

Chemical stability

Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Heat. Ignition sources. Incompatible materials.

Incompatible Materials: Oxidizing agents

Acids

Alkali Metals Bases Metals

Acid anhydrides Acid chlorides isocyanates

Hazardous decomposition

products:

Carbon oxides.

Other Information

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

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Information on likely routes of exposure

Principal Routes of Exposure:

Eyes. Ingestion. Inhalation. Skin.

Acute Toxicity

Component Information

Ethyl Alcohol 200 proof

CAS-No. 64-17-5

LD50/oral/rat = = 7060 mg/kg Oral LD50 Rat

LD50/oral/mouse = 3450 mg/kg Oral LD50 Mouse

LD50/dermal/rabbit = No information available

LD50/dermal/rat = No information available

LC50/inhalation/rat = 124.7 mg/L Inhalation LC50 Rat 4 h

LC50/inhalation/mouse = 39000 mg/m³ 4 h

Other LD50 or LC50information = >60000 ppm Inhalation LC50 Mouse 1 h

5900 mg/m³ Inhalation LC50 Rat 6 h

20000 ppm Inhalation LC50 Rat 10 h

5560 mg/kg Oral LD50 Guinea Pig

6300 mg/kg Oral LD50 Rabbit

Water

CAS-No. 7732-18-5

LD50/oral/rat = > 90 mL/kg Oral LD50 Rat

LD50/oral/mouse = No information available

LD50/dermal/rabbit = No information available

LD50/dermal/rat = No information available

LC50/inhalation/rat = No information available

LC50/inhalation/mouse = No information available

Other LD50 or LC50information = No information available

Bromocresol Green

CAS-No. | 76-60-8 **LD50/oral/rat** = No information available

LD50/oral/mouse = No information available

LD50/dermal/rabbit = No information available

LD50/dermal/rat = No information available

LC50/inhalation/rat = No information available

LC50/inhalation/mouse = No information available

Other LD50 or LC50information = No information available

Product Information

LD50/oral/rat =

VALUE- Acute Tox Oral = No information available

LD50/oral/mouse =

Value - Acute Tox Oral = No information available

LD50/dermal/rabbit

VALUE-Acute Tox Dermal = No information available

LD50/dermal/rat

VALUE -Acute Tox Dermal = No information available

LC50/inhalation/rat

VALUE-Vapor = No information available

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VALUE-Gas = No information available
VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse

VALUE-Vapor = No information available
VALUE - Gas = No information available
VALUE - Dust/Mist = No information available

Symptoms

Skin Contact: Causes skin irritation. Mildly to moderately irritating to the skin.

Eye Contact: Causes serious eye irritation. Causes moderate to severe eye irritation.

Inhalation May cause respiratory tract irritation. May cause dizziness and headache. May

cause drowsiness/sleepiness. May cause irritation of respiratory tract. Symptoms may include coughing and shortness of breath. May cause nausea and headache. It may affect behavior/central nervous system (ataxia, general anesthetic, drowsiness). May affect respiration (respiratory depression). Inhalation of high concentrations of vapor may cause anesthetic effects. Inhalation of high

concentrations of vapors may cause dizziness or suffocation. May affect the brain.

Ingestion May cause gastrointestinal tract irritation with nausea, vomiting, diarrhea, and

alterations in gastric secretions. May affect behavior/central nervous system

(central nervous system depression - amnesia, headache, muscular incoordination, excitation, mild euphoria, slurred speech, drowsiness, staggaring gait, fatigue, changes in mood/personality, excessive talking, dizziness, ataxia,

somnolence, coma/narcosis, hallucinations, distorted perceptions, general anesthetic), peripherial nervous system (spastic paralysis)vision (diplopia). Moderately toxic and narcotic in high concentrations. May also affect metabolism, blood, liver, respiration (dyspnea), and endocrine system. May affect respiratory tract, cardiovascular(cardiac arrhythmias, hypotension), and urinary systems. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause gastritis. May cause loss of appetite. May cause flushed skin. May affect the cardiovascular system (change in heart rate). May affect the cardiovascular system (hypotension or hypertension, tachycardia, dysrhythmias). It may affect behavior/central nervous system (excitation, mild euphoria, excessive talking, fatigue, headache, dizziness, drowsiness, staggaring gait, ataxia, hallucinations, slurred speech, amnesia, confusion, release of inhibitions, agressive behavior,

convulsions, coma). May affect respiration (dyspnea, respiratory depression). It may affect the brain. May affect liver. May affect the blood. May affect the endocrine system. It may affect the spleen. May affect urinary system (kidneys).

Aspiration hazard No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity Prolonged or repeated skin contact may cause dermatitis, and dryness and

cracking of the skin. Prolonged or repeated ingestion may affect behavior/central nervous system. Prolonged or repeated ingestion may affect metabolism (cause anorexia, weight loss). Prolonged or repeated ingestion may affect the liver (fatty liver degeneration, cirrhosis of the liver. Prolonged or repeated ingestion may affect the cardiovascular system. Prolonged or repeated inhalation may affect the

liver.

Sensitization: No information available.

Mutagenic Effects: For Ethyl alcohol:

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May affect genetic material

Experiments with bacteria and/or yeast have shown mutagenic effects

Carcinogenic effects: Equivocal tumorigenic agent by Registery of Toxic Effects of Chemical

Substances (RTECS) criteria. Confirmed Animal Carcinogen with Unknown

Relevance to Humans.

Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Ethyl Alcohol 200 proof	64-17-5	Carcinogenic to humans - Monograph 100E [2012] in		Not listed	Present	Not listed	Not listed
Water	7732-18-5	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed
Bromocresol Green	76-60-8	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

(In alcoholic beverages)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity May damage fertility or the unborn child

Reproductive Effects: Causes adverse reproductive effects

Developmental Effects: May cause harm to the unborn child

May cause adverse developmental effects
May cause birth defects (teratogenic effects)

Causes birth defects (teratogenic effects)

Specific Target Organ Toxicity

Teratogenic Effects:

STOT - single exposure Respiratory system. central nervous system.

STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure. liver. central

nervous system. Skin. Reproductive System.

Target Organs: Skin. Liver. Central nervous system. Nervous system. Heart.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Aquatic environment.

Ethyl Alcohol 200 proof - 64-17-5

Freshwater Fish Species Data: 12.0 - 16.0 mL/L LC50 Oncorhynchus mykiss 96 h static 1 100 mg/L LC50

Pimephales promelas 96 h static 1 13400 - 15100 mg/L LC50 Pimephales

promelas 96 h flow-through 1

Water Flea Data: 9268 - 14221 mg/L LC50 Daphnia magna 48 h 2 mg/L EC50 Daphnia magna 48 h

10800 mg/L EC50 Daphnia magna 24 h

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Persistence and degradability: No information available

Bioaccumulative potential: No information available.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Components	CAS-No.	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
		wasies	wasies	wasies	Wasies
Ethyl Alcohol 200 proof	64-17-5	None	None	None	None
Water	7732-18-5	None	None	None	None
Bromocresol Green	76-60-8	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: UN1170

Proper Shipping Name: Ethanol solution

Hazard Class: 3

Subsidiary Class No information available

Packing group:

Emergency Response Guide No information available

Number

Marine Pollutant
DOT RQ (lbs):
Special Provisions
Symbol(s):
No information available
No information available
No information available
No information available
UN1170,Ethanol ,3,PG II

TDG (Canada)

UN-No: UN1170

Proper Shipping Name: Ethanol solution

Hazard Class: 3

Subsidiary Risk: No information available

Packing Group:

Marine PollutantNo Information availableDescription:UN1170,ETHANOL,3,PG II

ADR

UN-No: UN1170

Proper Shipping Name: Ethanol solution

Hazard Class: 3
Packing Group: ||

Subsidiary Risk: No information available **Description:** UN1170 Ethanol,3,II

IMO / IMDG

UN-No: UN1170

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Proper Shipping Name: Ethanol solution

Hazard Class: 3

Subsidiary Risk: No information available

Packing Group:

Marine Pollutant No information available

EMS: F-E

RID

UN-No: UN1170

Proper Shipping Name: Ethanol solution

Hazard Class: 3

Subsidiary Risk: No information available

Packing Group:

Description: UN1170 Ethanol,3,II

ICAO

UN-No: UN1170

Proper Shipping Name: Ethanol solution

Hazard Class: 3

Subsidiary Risk: No information available

Packing Group:

Description: UN1170, Ethanol solution, 3, PG II

IATA

UN-No: UN1170

Proper Shipping Name: Ethanol solution

Hazard Class: 3

Subsidiary Risk: No information available

Packing Group: II ERG Code: 3L

Special Provisions No information available

Description: UN1170,Ethanol solution,3,PG II

15. REGULATORY INFORMATION

International Inventories

Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Ethyl Alcohol 200 proof	64-17-5	Present	KE-13217	Present	(2)-202	Present	Present	Present 200-578-6
Water	7732-18-5	Present	Present KE-35400	Present	Not present	Present	Present	Present 231-791-2
Bromocresol Green	76-60-8	Present	Present KE-02745	Present	Not present	Present	Present	Present 200-972-8

U.S. Regulations

Ethyl Alcohol 200 proof

Massachusetts RTK: Present

New Jersey RTK Hazardous Substance List: 0844

Pennsylvania RTK: Present

Minnesota - Hazardous Substance List: Present

Louisana Reportable Quantity List for Pollutants: Present (listed as Volatile Organic Compounds)

California Directors List of Hazardous Substances: Present

FDA - Food Additives Generally Recognized as Safe (GRAS): 21 CFR 184.1293

FDA - 21 CFR - Total Food Additives 169.175, 169.176, 169.177, 169.181, 172.340, 172.560, 172.580, 175.105, 176.180, 176.200, 177.1200, 177.1650, 178.1010, 184.1293, 73.30, 73.345, 73.615

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

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Chemicals Known to the State of California to Cause Cancer:

⚠WARNING: This product contains a chemical known to the State of California to cause cancer. (See table below)

WARNING: This product can expose you to chemicals including (see table below) which is (are) known to the State of California to cause cancer. For more information go to www.p65warnings.ca.gov.

Chemicals Known to the State of California to Cause Reproductive Toxicity:

📤 WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm (See table below) WARNING: This product can expose you to chemicals including (see table below) which is (are) known to the State of California to cause birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Components	CAS-No.	Carcinogen			Female Reproductive Toxicity:
Ethyl Alcohol 200 proof		(Ethanol in	developmental toxicity (Ethyl alcohol in alcoholic beverages)	· · · · · = · · · · · · · ·	Not Listed
Water	7732-18-5	Not Listed	Not Listed	Not Listed	Not Listed
Bromocresol Green	76-60-8	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	CAS-No.	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
Ethyl Alcohol 200 proof	64-17-5	None	None	None	None	None
Water	7732-18-5	None	None	None	None	None
Bromocresol Green	76-60-8	None	None	None	None	None

U.S. TSCA

Components			TSCA 8(d) -Health and Safety Reporting
Ethyl Alcohol 200 proof	64-17-5	Not Applicable	Not Applicable
Water	7732-18-5	Not Applicable	Not Applicable
Bromocresol Green	76-60-8	Not Applicable	Not Applicable

Canada

WHIMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

Component Ethyl Alcohol 200 proof 64-17-5 (94.95)

Water 7732-18-5 (5) WHMIS 2015 Hazard Classification

Flammable liquids - Category 2: H225 Highly flammable liquid and vapour.; Serious Eye Damage/Eye Irritation - Category 2B: H320

Causes eve irritation.

Not a dangerous product according to HPR classification criteria

Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

WHMIS 1988 Hazard Class

B2 Flammable liquid D2B Toxic materials

WHMIS 1988 Components Ethyl Alcohol 200 proof B2,D2B

Product code: B-297 Product name: BROMOCRESOL 13 / 15 GREEN TS, (U.S.P. TEST SOLUTION)

Water

Uncontrolled product according to WHMIS classification

criteria

Bromocresol Green

Uncontrolled product according to WHMIS classification criteria

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Components	WHMIS Ingredient Disclosure List -
Ethyl Alcohol 200 proof	0.1 %

Inventory

Components	CAS-No.	Canada (DSL)	Canada (NDSL)
Ethyl Alcohol 200 proof	64-17-5	Present	Not Listed
Water	7732-18-5	Present	Not Listed
Bromocresol Green	76-60-8	CEPA, subsection 81(3) applies	Not Listed

Components	CAS-No.	CEPA Schedule I - Toxic Substances
Ethyl Alcohol 200 proof	64-17-5	Not listed
Water	7732-18-5	Not listed
Bromocresol Green	76-60-8	Not listed
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Ethyl Alcohol 200 proof	64-17-5	Not listed
Water	7732-18-5	Not listed
Bromocresol Green	76-60-8	Not listed

EU Classification

EU GHS - SV - CLP 1272/2008

Components	CAS-No.	EU GHS - SV - CLP (1272/2008)
Ethyl Alcohol 200 proof	64-17-5	Flammable liquids - Flam. Liq. 2: H225
		Highly flammable liquid and
		vapour.603-002-00-5
Water	7732-18-5	
Bromocresol Green	76-60-8	

EU - CLP (1272/2008)

R-phrase(s)

R11 - Highly flammable.

S -phrase(s)

S 7 - Keep container tightly closed.

S16 - Keep away from sources of ignition - No smoking.

Components	CAS-No.	Classification	Concentration	Safety Phrases
			Limits:	-
Ethyl Alcohol 200 proof	64-17-5	F; R11	No information	S: 7 16
Water	7732-18-5		No information	
Bromocresol Green	76-60-8		No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

F - Highly flammable.

Product code: B-297 Product name: BROMOCRESOL 14 / 15
GREEN TS, (U.S.P. TEST SOLUTION)



16. OTHER INFORMATION

Preparation Date: 06/23/2015
Revision Date: 12/19/2017
Prepared by: Sonia Owen

Disclaimer: All chemicals may pose unknown hazards and should be used with caution. This

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completeness or accuracy of the information contained herein.

End of Safety Data Sheet

Product code: B-297

Product name: BROMOCRESOL GREEN TS, (U.S.P. TEST SOLUTION)