spectrum®



SAFETY DATA SHEET

Preparation Date: 05/13/2015	Revision date 12/10/2018	Revision Number: G2		
1. Identification				
Product identifier				
Product code: Product Name:	BR115 BRILLIANT GREEN			
<u>Other means of identification</u> Synonyms:	N-[4-[4-(Diethylamino)benzhydrylene]cyclohex um hydrogen sulfate; Basic Green 1	a-2,5-dien-1-ylidene]diethylammoni		
CAS #: RTECS #	633-03-4 BP6825000			
CI#:	42040			
Recommended use of the chem	ical and restrictions on use			
Recommended use: Uses advised against	Dyes. Antiseptic. No information available			
Supplier:	Spectrum Chemical Mfg. Corp 14422 South San Pedro St. Gardena, CA 90248 (310) 516-8000			
Order Online At: Emergency telephone number Contact Person: Contact Person:	https://www.spectrumchemical.com Chemtrec 1-800-424-9300 Tom Tyner (USA - West Coast) Ibad Tirmiz (USA - East Coast)			
	2. HAZARDS IDENTIFICATION			

Classification

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

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

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A

Label elements

Warning

Hazard statements Harmful if swallowed Causes skin irritation Causes serious eye irritation



Hazards not otherwise classified (HNOC) Not Applicable

Other hazards

Not available

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Wear protective gloves Wear eye/face protection

Precautionary Statements - Response

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: Wash with plenty of water If skin irritation occurs: Get medical advice/attention Take off contaminated clothing and wash it before reuse IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell Rinse mouth

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight-%
Brilliant Green	633-03-4	100

4. FIRST AID MEASURES

First aid measures

General Advice:	National Capital Poison Center in the United States can provide assistance in have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.	if you
Skin Contact:	Wash off immediately with soap and plenty of water removing all contaminated clothi shoes. Get medical attention. If skin irritation persists, call a physician.	ing and
Eye Contact:	Flush eyes with water for 15 minutes. Get medical attention. If symptoms persist, cal physician.	la
Inhalation:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.	/e
Ingestion:	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.	
Most important symptoms and effe	cts, both acute and delayed	
Symptoms	Causes serious eye irritation	
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	Eye contact may result in redness or pain Causes skin irritation Skin contact may result in redness, pain, inflammation, itching, scaling May cause diarrhea Abdominal pain		
Indication of any immediate medica	al attention and special tr	reatment needed	
Notes to Physician:	Treat symptomatically.		
Protection of first-aiders First-Aid Providers: Avoid exposure t contaminated clothing and equipment		ar gloves and other necessary protective clothing. Dispose of	
	5. FIRE-FIGHT	ING MEASURES	
Extinguishing Media Suitable Extinguishing Media:		Carbon dioxide (CO2). Dry chemical. Water spray mist or foam.	
Unsuitable Extinguishing Media	a:	No information available.	
Specific hazards arising from	n the chemical		
Hazardous combustion produc	ts	Carbon Monoxide, Carbon Dioxide. Nitrogen oxides (NOx). Sulfur oxides.	
Specific hazards		May be combustible at high temperatures.	
Special Protective Actions for	or Firefighters		
Specific Methods:		No information available	
Special Protective Equipment for	or 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. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Remove all sources of ignition.		
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. Cover with plastic sheet to prevent spreading.		
Methods for cleaning up	Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.		
7 HANDI ING AND STORAGE			

7. HANDLING AND STORAGE

Precautions for safe handling

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Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not ingest. Do not breathe dust. 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. Hygroscopic.

Incompatible Materials:

Oxidizing agents Reducing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Component	CAS No	OSHA	NIOSH	ACGIH	AIHA WEEL
Brilliant Green	633-03-4	None	None	None	None

Canada

Component	CAS No	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Brilliant Green	633-03-4	None	None	None	None

Australia and Mexico

Component	CAS No	Australia	Mexico
Brilliant Green	633-03-4	None	None

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection:	Goggles or Safety glasses with side-shields.
Skin and body protection:	Chemical resistant apron Gloves Long sleeved clothing

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Respiratory protection:

Effective dust mask. or. Wear respirator with dust filter. Use a dust respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentration of dust (dust clouds), inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.

Hygiene measures:

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid

Odor: No information available.

Molecular/Formula weight (g/mole): Flammability (solid, gas) 482.64

Flash Point Tested according to: Not available

Upper Explosion Limit (%): No information available

Boiling point/range(°C/°F): No information available

Specific gravity: No information available

Evaporation rate: No information available

Odor threshold (ppm): No information available

Miscibility: No information available Appearance: Crystalline powder.

Taste No information available.

no data available

Autoignition Temperature (°C/°F): No information available

Melting point/range(°C/°F): No information available

Bulk density: No information available

pН No information available

Vapor density: No information available

Partition coefficient (n-octanol/water): No information available

Solubility: Soluble in cold water Soluble in hot water Solubility in Water: 4500 mg/L @ 25°C Soluble in Ethanol Solubility in Ethanol: 50 mg/ml

Color: Green.

Formula C27H34N2O4S

Flashpoint (°C/°F): No information available

Lower Explosion Limit (%): No information available

Decomposition temperature(°C/°F): 210-230°C/410-446°F

Density (g/cm3): No information available

Vapor pressure @ 20°C (kPa): No information available

VOC content (g/L): No information available

Viscosity: No information available

10. STABILITY AND REACTIVITY

Reactivity Reactive with oxidizing agents Reacts with reducing agents

Chemical stability	
Stability:	Hygroscopic. Stable at normal conditions.
Possibility of Hazardous Reactions:	Hazardous polymerization does not occur
Conditions to avoid:	Heat. Exposure to moisture. Exposure to moist air. Incompatible materials.

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Incompatible Materials:	Oxidizing agents Reducing agents
Hazardous decomposition products:	When heated to decomposition it emits very toxic fumes. Ammonia. Nitrogen oxides (NOx). Sulfur oxides.
Other Information Corrosivity:	No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure: Eyes. Ingestion. Inhalation. Skin.

Acute Toxicity

Component Information

Brilliant Green		
CAS No	633-03-4	
LD50/oral/rat =	313 mg/kg	
LD50/oral/mous	e = No information available	
LD50/dermal/ral	bbit = No information available	
LD50/dermal/rat	x = No information available	
LC50/inhalation	<pre>/rat = No information available</pre>	
LC50/inhalation	<pre>/mouse = No information available</pre>	
Other LD50 or L	.C50information = No information available	
Product Informatio	n	

LD50/oral/rat = Value - Acute Tox Dermal = 313 mg/kg

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 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.
Eye Contact:	Causes serious eye irritation.
Inhalation	Irritating to respiratory system.
Ingestion	Harmful if swallowed. May cause abdominal pain. May cause diarrhea.
Aspiration hazard	No information available.
Delayed and immediate effects	as well as chronic effects from short and long-term exposure
Chronic Toxicity	No information available.
Sensitization:	No information available.
Mutagenic Effects:	Mutations in microorganisms Experiments with bacteria and/or yeast have shown mutagenic effects

Carcinogenic effects:

Not considered carcinogenic.

Component	CAS No	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Brilliant Green	633-03-4	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

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

Reproductive toxicity	No data is available		
Reproductive Effects:	No information available		
Developmental Effects:	No information available		
Teratogenic Effects:	No information available		

Specific Target Organ Toxicity

STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Target Organs:	No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: No data available.

Persistence and degradability: No information available

Bioaccumulative potential:

Mobility in soil Other adverse effects No information available.

No information available 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

Component	CAS No	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Brilliant Green	633-03-4	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: Proper Shipping Name: Hazard Class Subsidiary Class Packing group: Emergency Response Guide Number Marine Pollutant DOT RQ (lbs):	Not Regulated No information available No information available No information available No information available No data available No information available
Special Provisions	No Information available
Symbol(s):	No information available
Description:	No information available
TDG (Canada) UN-No: Proper Shipping Name: Hazard Class Subsidiary Risk: Packing Group: Marine Pollutant Description:	Not Regulated No information available No information available No information available No information available No Information available No information available
ADR	
UN Number	Not regulated
Proper Shipping Name:	No information available No information available
Transport hazard class(es) Packing group	No information available
Subsidiary Risk:	No information available
IMDG UN-No: Proper Shipping Name: Hazard Class: Subsidiary Risk: Packing Group:	Not Regulated No information available No information available No information available No information available

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Marine Pollutant	No information available
RID UN Number Proper Shipping Name: Transport hazard class(es) Subsidiary Risk: Packing group	Not Regulated No information available No information available No information available No information available
ICAO (air) UN-No: Proper Shipping Name: Hazard Class Subsidiary Risk: Packing Group:	Not Regulated No information available No information available No information available No information available
IATA UN Number Proper Shipping Name: Transport hazard class(es) Subsidiary Risk: Packing group Precautionary Statements - Response Special Provisions	Not Regulated No information available No information available No information available No information available IF exposed or concerned No information available

15. REGULATORY INFORMATION

International Inventories

Component	CAS No	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	China IECSC	Australia AICS	EINECS-No.
Brilliant Green	633-03-4	PresentACTIV E	Present KE-06975	Present	Present (5)-2031	Present	Present	Present 211-190-1

U.S. Regulations

Brilliant Green

Massachusetts RTK: Present

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

<u>Chemicals Known to the State of California to Cause Cancer:</u> This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

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

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Component	CAS No	Carcinogen	Developmental Toxicity	Male	Female
					Reproductive
				Toxicity	Toxicity:
Brilliant Green	633-03-4	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Component	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
Brilliant Green	633-03-4	None	None	None	None	None

U.S. TSCA

Component		TSCA Section 5(a)2 - Chemicals With Significant New Use Rules	TSCA 8(d) -Health and Safety Reporting
		(SNURS)	
Brilliant Green	633-03-4	Not Applicable	Not Applicable

Canada

WHIMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

Component Brilliant Green 633-03-4 (100) WHMIS 2015 Hazard Classification Serious Eye Damage/Eye Irritation - Category 2: H319 Causes serious eye irritation.

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

DSL/NDSL

Brilliant Green 633-03-4 Present Not Listed	Component	CAS No	Canada (DSL)	Canada (NDSL)
	Brilliont (2roon		Present	Not Listed

Component	CAS No	CEPA Schedule I - Toxic Substances
Brilliant Green	633-03-4	Not listed
Component	CAS No	CEPA - 2010 Greenhouse Gases Subject
		to Mandatory Reporting
Brilliant Green	633-03-4	Not listed

EU Classification

EU GHS - SV - CLP 1272/2008

Component	CAS No	EU GHS - SV - CLP (1272/2008)
Brilliant Green	633-03-4	

EU - CLP (1272/2008)

R-phrase(s)

R22 - Harmful if swallowed

R36/37/38 - Irritating to eyes, respiratory system and skin

S -phrase(s)

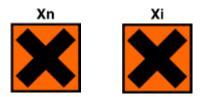
none

Component	CAS No	Classification	Concentration Limits:	Safety Phrases
Brilliant Green	633-03-4		No information	

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

Indication of danger:

Xn - Harmful Xi - Irritant



16. OTHER INFORMATION

Preparation Date: Revision date Prepared by: 05/13/2015 12/10/2018 Sonia Owen

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet