

**Product identifier** 

1.1.

# **Brilliant Green**

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 11/05/2014

Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1.	Product identifier	
Product	t form	: Substance
Substance name		: Brilliant Green
Chemic	al name	: [4-[4-(Diethylamino)benzhydrylene]cyclohexa-2,5-dien-1-ylidene]diethylammonium hydrogen sulfate
CAS No	0	: 633-03-4
Product	t code	: LC11795
Formula	a	: C27H34N2O4S
Other m	neans of identification	: Emerald Green Diamond Green Malachite Green G Basic Green 1 Astradiamant Green GX
1.2.	Relevant identified uses of the sub	stance or mixture and uses advised against
Jse of t	the substance/mixture	: For laboratory and manufacturing use only.
1.3.	Details of the supplier of the safety	/ data sheet
Zelieno T 412-8 info@la	n's Pointe Commerce Park Building 1000 ple, PA 16063 - USA 326-5230 - F 724-473-0647 <u>abchem.com</u> - <u>www.labchem.com</u>	0, 1010 Jackson's Pointe Court
1.4.	Emergency telephone number	
=merge	ency number	: CHEMTREC: 1-800-424-9300 or 011-703-527-3887
	ION 2: Hazards identification Classification of the substance or r	
	Glassification of the substance of t	
	S classification	in Atti e
GHS-U Acute T Eye Irrit	S classification Tox. 4 (Oral) H302	
GHS-U Acute T Eye Irrit Full tex	S classification Tox. 4 (Oral) H302 t. 2A H319	
GHS-U Acute T Eye Irrit Full tex 2.2.	<b>S classification</b> Tox. 4 (Oral) H302 t. 2A H319 t of H-phrases: see section 16	
GHS-U Acute T Eye Irrit Full tex 2.2. GHS-U	S classification fox. 4 (Oral) H302 t. 2A H319 t of H-phrases: see section 16 Label elements	: ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;
GHS-U Acute T Eye Irrit Full tex 2.2. GHS-U Hazard	S classification Tox. 4 (Oral) H302 t. 2A H319 t of H-phrases: see section 16 Label elements S labelling	
GHS-U Acute T Eye Irrit Full tex 2.2. GHS-U Hazard	S classification Tox. 4 (Oral) H302 t. 2A H319 t of H-phrases: see section 16 Label elements S labelling pictograms (GHS-US)	T CHS07
GHS-U Acute T Eye Irrit Full tex 2.2. GHS-U Hazard Signal v Hazard	S classification Tox. 4 (Oral) H302 t. 2A H319 t of H-phrases: see section 16 Label elements S labelling pictograms (GHS-US) word (GHS-US)	: GHS07 : Warning : H302 - Harmful if swallowed
GHS-U Acute T Eye Irrit Full tex 2.2. GHS-U Hazard Signal v Hazard	S classification Fox. 4 (Oral) H302 t. 2A H319 t of H-phrases: see section 16 Label elements S labelling pictograms (GHS-US) word (GHS-US) statements (GHS-US)	<ul> <li>:</li></ul>
GHS-U Acute T Eye Irrit Full tex 2.2. GHS-U Hazard Signal v Hazard Precaut	S classification Fox. 4 (Oral) H302 t. 2A H319 t of H-phrases: see section 16 Label elements S labelling pictograms (GHS-US) word (GHS-US) statements (GHS-US) tionary statements (GHS-US) tionary statements (GHS-US)	<ul> <li>:</li></ul>

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

according to Federal Register / Vol. 77, No. 58 / Monday,	March 26,	2012 / Rules and Regulations		
2.4. Unknown acute toxicity (GHS-US)				
Not applicable				
<b>SECTION 3: Composition/informatio</b>	n on in	gredients		
3.1. Substance				
Substance type	: Multi-	constituent		
Name		Product identifier	%	GHS-US classification
Brilliant Green		(CAS No) 633-03-4	100	Acute Tox. 4 (Oral), H302
(Main constituent)				Eye Irrit. 2A, H319
Full text of H-phrases: see section 16 3.2. Mixture				
Not applicable				
4.1. Description of first aid measures First-aid measures general		give anything by mouth to an unconscic	us person If vo	nu feel unwell, seek medical
-	advice	e (show the label where possible).		u leel unwell, seek medical
First-aid measures after inhalation		e fresh air breathing. Allow the victim to		han the second sectors. Collected
First-aid measures after skin contact		ve affected clothing and wash all expose rm water rinse.	ed skin area with	n mild soap and water, followed
First-aid measures after eye contact		cautiously with water for several minute ontinue rinsing. If eye irritation persists: C		
First-aid measures after ingestion		mouth. Do NOT induce vomiting. Obtair ER/doctor/physician if you feel unwell.	emergency me	edical attention. Call a POISON
4.2. Most important symptoms and effect	ts, both a	acute and delayed		
Symptoms/injuries after eye contact	: Cause	es serious eye irritation.		
Symptoms/injuries after ingestion	: Swall	owing a small quantity of this material wil	I result in seriou	us health hazard.
4.3. Indication of any immediate medica	l attentio	n and special treatment needed		
Obtain medical assistance.				
SECTION 5: Firefighting measures				
5.1. Extinguishing media				
Suitable extinguishing media	: Foam	. Dry powder. Carbon dioxide. Water spr	ay. Sand.	
Unsuitable extinguishing media	: Do no	t use a heavy water stream.		
5.2. Special hazards arising from the sul	bstance o	or mixture		
No additional information available				
5.3. Advice for firefighters				
Firefighting instructions		vater spray or fog for cooling exposed co cal fire. Prevent fire-fighting water from e		
Protection during firefighting		t enter fire area without proper protective	0	
<b>SECTION 6: Accidental release meas</b>	sures			
6.1. Personal precautions, protective eq	uipment	and emergency procedures		
6.1.1. For non-emergency personnel				
Protective equipment	: Dust i	nask. Safety glasses. Gloves.		
Emergency procedures	: Evacu	ate unnecessary personnel.		
6.1.2. For emergency responders				
Protective equipment	: Equip	cleanup crew with proper protection.		
Emergency procedures		ate area.		
6.2. Environmental precautions				
Prevent entry to sewers and public waters. Notify	authoritie	es if liquid enters sewers or public waters	S.	
6.3. Methods and material for containme	ent and cl	eaning up		
Methods for cleaning up	: On la	nd, sweep or shovel into suitable contain other materials.	ers. Minimize g	eneration of dust. Store away
6.4. Reference to other sections				
See Heading 8. Exposure controls and personal	protection	l.		
	protectior	L.		

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.
Hygiene measures	: Do not eat, drink or smoke when using this product. Wash exposed skin thoroughly after handling.
7.2. Conditions for safe storage, includin	g any incompatibilities
Storage conditions	: Keep container closed when not in use.
Incompatible products	: Strong oxidizers. Strong reducing agents.
Incompatible materials	: None known.
7.3. Specific end use(s)	

No additional information available

### **SECTION 8: Exposure controls/personal protection**

8.1. Control parameters			
Brilliant Green (633-03-4)			
ACGIH	Not applicable		
OSHA	Not applicable		
8.2. Exposure controls			
Appropriate engineering control	: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation.		
Personal protective equipment	: Avoid all unnecessary exposure.		
Hand protection	: Wear protective gloves.		
Eye protection	: Chemical goggles or safety glasses.		
Respiratory protection	: Wear appropriate mask.		
Other information	: Do not eat, drink or smoke during use.		

## **SECTION 9: Physical and chemical properties**

9.1. Information on basic physical and	chemical properties	
Physical state	: Solid	
Appearance	: Crystalline powder.	
Colour	: Dark green	
Odour	: None.	
Odour threshold	: No data available	
рН	: No data available	
Relative evaporation rate (butylacetate=1)	: No data available	
Melting point	: 210 °C	
Freezing point	: No data available	
Boiling point	: No data available	
Flash point	: No data available	
Auto-ignition temperature	: No data available	
Decomposition temperature	: 210 °C	
Flammability (solid, gas)	: No data available	
Vapour pressure	: No data available	
Relative vapour density at 20 °C	: No data available	
Relative density	: No data available	
Solubility	: Soluble in water. Soluble in ethanol. Water: 40 g/l Ethanol: 50 mg/ml	
Log Pow	: No data available	
Log Kow	: No data available	
Viscosity, kinematic	: No data available	
11/05/2014	EN (English)	3/6

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

coolding to rederal register / r	in TT, NO. 367 Monday, March 20, 20127 Rules and Regulations	
Viscosity, dynamic	: No data available	
Explosive properties	: No data available	
Oxidising properties	: No data available	
Explosive limits	: No data available	
9.2. Other information	on la	
No additional information a	vailable	
SECTION 10: Stabili	ty and reactivity	
10.1. Reactivity		
No additional information a	vailable	
10.2. Chemical stabil	ty	
Stable under normal condit	ions.	
10.3. Possibility of ha	zardous reactions	
Not established.		
10.4. Conditions to av	<i>r</i> oid	
Direct sunlight. Extremely h	high or low temperatures.	
10.5. Incompatible ma	aterials	
Strong reducing agents. St	rong oxidizers.	
10.6. Hazardous deco	omposition products	
Nitrogen oxides. Carbon m	onoxide. Carbon dioxide. Sulfur compounds.	

### **SECTION 11: Toxicological information**

### Information on toxicological effects 11.1.

### Acute toxicity

: Oral: Harmful if swallowed.

Brilliant Green ( \f )633-03-4	
LD50 oral rat	313 mg/kg
ATE US (oral)	313.000 mg/kg bodyweight
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met. Harmful if swallowed.
Symptoms/injuries after eye contact	: Causes serious eye irritation.
Symptoms/injuries after ingestion	: Swallowing a small quantity of this material will result in serious health hazard.

### **SECTION 12: Ecological information**

12.1.	Toxicity	
No add	itional information available	

2.2. Persistence and degradability		
Brilliant Green (633-03-4)		
Persistence and degradability	Not established.	
2.3. Bioaccumulative potential		
Brilliant Green (633-03-4)		
Bioaccumulative potential	Not established.	
1/05/2014	EN (English)	4/6

12.4. Mobility in soil	
No additional information available	
2.5. Other adverse effects	
Effect on ozone layer	:
Other information	: Avoid release to the environment.
SECTION 13: Disposal considerat	ions
3.1. Waste treatment methods	
Vaste disposal recommendations	<ul> <li>Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to comply with local, state and federal regulations.</li> </ul>
Ecology - waste materials	: Avoid release to the environment.
SECTION 14: Transport information	bn
n accordance with DOT	
Not regulated for transport	
Additional information	
Other information	: No supplementary information available.
ADR	
No additional information available	
Transport by sea No additional information available	
Air transport	
No additional information available	
SECTION 15: Regulatory informat	ion
15.1. US Federal regulations	
Brilliant Green (633-03-4)	
Listed on the United States TSCA (Toxic Su	Ibstances Control Act) inventory
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
15.2. International regulations	
CANADA	
Brilliant Green (633-03-4)	
	tances List)
Brilliant Green (633-03-4)	tances List) Class D Division 2 Subdivision B - Toxic material causing other toxic effects
Brilliant Green (633-03-4) Listed on the Canadian DSL (Domestic Sus WHMIS Classification	
Listed on the Canadian DSL (Domestic Sus	
Brilliant Green (633-03-4) Listed on the Canadian DSL (Domestic Sus WHMIS Classification EU-Regulations Classification according to Regulation (EC	Class D Division 2 Subdivision B - Toxic material causing other toxic effects
Brilliant Green (633-03-4) Listed on the Canadian DSL (Domestic Sus WHMIS Classification EU-Regulations Classification according to Regulation (EC Not classified	Class D Division 2 Subdivision B - Toxic material causing other toxic effects
Brilliant Green (633-03-4)         Listed on the Canadian DSL (Domestic Sus         WHMIS Classification         EU-Regulations         Classification according to Regulation (EC         Not classified         Classification according to Directive 67/54	Class D Division 2 Subdivision B - Toxic material causing other toxic effects
Brilliant Green (633-03-4)         Listed on the Canadian DSL (Domestic Sus         WHMIS Classification         EU-Regulations         Classification according to Regulation (EC         Not classified         Classification according to Directive 67/54         Not classified	Class D Division 2 Subdivision B - Toxic material causing other toxic effects
Brilliant Green (633-03-4) Listed on the Canadian DSL (Domestic Sus WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects
Brilliant Green (633-03-4)         Listed on the Canadian DSL (Domestic Sus         WHMIS Classification         EU-Regulations         Classification according to Regulation (EC         Not classified         Classification according to Directive 67/54         Not classified         15.2.2.       National regulations	Class D Division 2 Subdivision B - Toxic material causing other toxic effects C) No. 1272/2008 [CLP] H8/EEC or 1999/45/EC
Brilliant Green (633-03-4)         Listed on the Canadian DSL (Domestic Sus         WHMIS Classification         EU-Regulations         Classification according to Regulation (EC)         Not classified         Classification according to Directive 67/54         Not classified         15.2.2.         National regulations         Brilliant Green (633-03-4)         Not listed on the Canadian IDL (Ingredient E	Class D Division 2 Subdivision B - Toxic material causing other toxic effects C) No. 1272/2008 [CLP] H8/EEC or 1999/45/EC
Brilliant Green (633-03-4)         Listed on the Canadian DSL (Domestic Sus         WHMIS Classification         EU-Regulations         Classification according to Regulation (EC         Not classified         Classification according to Directive 67/54         Not classified         15.2.2.         National regulations         Brilliant Green (633-03-4)	Class D Division 2 Subdivision B - Toxic material causing other toxic effects C) No. 1272/2008 [CLP] H8/EEC or 1999/45/EC

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Full text of H-phrases: see section 16	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
H302	Harmful if swallowed
H319	Causes serious eye irritation
NFPA health hazard	: 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.
NFPA fire hazard	: 0 - Materials that will not burn.
NFPA reactivity	: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.
HMIS III Rating	
Health	: 2 Moderate Hazard - Temporary or minor injury may occur
Flammability	: 0 Minimal Hazard
Physical	: 0 Minimal Hazard
Personal Protection	: E
SDS US (GHS HazCom 2012)	

Information in this SDS is from available published sources and is believed to be accurate. No warranty, express or implied, is made and LabChem Inc assumes no liability resulting from the use of this SDS. The user must determine suitability of this information for his application.