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SAFETY DATA SHEET

Classified in accordance 29 CFR 1910.1200

1. Identification

Product identifier

Product No.:	Product name:	Common name(s), synonym(s)
212526	BD BBL™ Gram Crystal Violet, 1 x 3.8 L	No data available

Recommended restrictions

Recommended use: Scientific and industrial laboratory use. For In Vitro Diagnostic Use.
Restrictions on use: None known.

Manufacturer/Importer/Distributor Information

Manufacturer

Company Name:	BD, Integrated Diagnostic Solutions
Address:	7 Loveton Circle Sparks, MD 21152 USA
Telephone:	1 844 823 5433
Fax:	not available
Contact Person:	Tech Services

Emergency telephone number: CHEMTREC 1 800 424 9300

2. Hazard(s) identification

Hazard Classification

Physical Hazards

Flammable liquids	Category 3

Health Hazards

Carcinogenicity	Category 1B
Specific Target Organ Toxicity - Single Exposure	Category 1

Environmental Hazards

Acute hazards to the aquatic environment	Category 3
Chronic hazards to the aquatic environment	Category 3

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Label Elements

Hazard Symbol:



Signal Word: Danger

Hazard Statement:
H226: Flammable liquid and vapor.
H350: May cause cancer.
H370: Causes damage to organs.
H412: Harmful to aquatic life with long lasting effects.

Precautionary Statements

Prevention:
P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233: Keep container tightly closed.
P240: Ground and bond container and receiving equipment.
P241: Use explosion-proof electrical, ventilating and lighting equipment.
P242: Use non-sparking tools.
P243: Take action to prevent static discharges.
P260: Do not breathe dust/fume/gas/mist/vapors/spray.
P264: Wash face, hands and any exposed skin thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P281: Use personal protective equipment as required.

Response:
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P307+P311: IF exposed: Call a POISON CENTER or doctor/ physician.
P308+P313: IF exposed or concerned: Get medical advice/attention.
P370 + P378: In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

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Storage:	P403+P235: Store in a well-ventilated place. Keep cool. P405: Store locked up.
Disposal:	P501: Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.
Other hazards which do not result in GHS classification:	FK: Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Spark: Sparks may ignite liquid and vapor. H241: May cause flash fire or explosion.

3. Composition/information on ingredients

Mixtures

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
2-Propanol	No data available.	67-63-0	5%
Methanol	No data available.	67-56-1	2.4%
Ethanol	No data available.	64-17-5	2.4%
Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (1:1)	No data available.	548-62-9	0.4%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Description of necessary first-aid measures

General information:	Get medical attention if symptoms occur.
Inhalation:	Provide fresh air, warmth and rest, preferably in comfortable upright sitting position.
Skin Contact:	Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse.

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Eye contact:	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses.
Ingestion:	Call a physician or poison control center immediately. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person.
Personal Protection for First-aid Responders:	No data available.

Most important symptoms and effects, both acute and delayed

Symptoms:	Symptoms may be delayed.
Hazards:	May cause cancer. Causes damage to organs.

Indication of immediate medical attention and special treatment needed

Treatment:	IF exposed or concerned: Get medical advice/attention.

5. Fire-fighting measures

General Fire Hazards:	Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Use water spray to keep fire-exposed containers cool. In case of fire: Evacuate area.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media:	Not applicable
Special hazards arising from the substance or mixture:	Fire or excessive heat may produce hazardous decomposition products.

Special protective equipment and precautions for fire-fighters

Special fire-fighting procedures:	May travel considerable distance to source of ignition and flash back.May explode when heated or when exposed to flames or sparks.
Special protective equipment for fire-fighters:	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:	Contact local authorities in case of spillage to drain/aquatic environment. Ensure suitable personal protection (including respiratory protection) during removal of spillages in a confined area.

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Accidental release measures: **Methods and material for containment and cleaning up:**	No data available. All equipment used when handling the product must be grounded. Eliminate sources of ignition. Prevent spreading of vapors through sewers, ventilation systems and confined areas. Absorb spillage with suitable absorbent material. Prevent runoff from entering drains, sewers, or streams. See Section 8 of the SDS for Personal Protective Equipment. For waste disposal, see section 13 of the SDS.
Environmental Precautions:	Avoid release to the environment.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation):	Use explosion-proof ventilation equipment. Adequate ventilation should be provided so that exposure limits are not exceeded.
Safe handling advice:	When using do not eat, drink or smoke. Read and follow manufacturer's recommendations. Use personal protective equipment as required. Use spark-proof tools and explosion-proof equipment.
Contact avoidance measures:	No data available.

Storage

Safe storage conditions:	Keep container tightly closed. Keep in a cool, ventilated location far from heat source and flame
Safe packaging materials:	No data available.

8. Exposure controls/personal protection

Control Parameters
Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values		Source
2-Propanol	TWA	400 ppm	980 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	STEL	500 ppm	1,225 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	TWA	400 ppm	980 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A
	STEL	500 ppm	1,225 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A

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	AN ESL		200 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	ST ESL		2,000 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	AN ESL		492 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	ST ESL		4,920 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	TWA PEL	400 ppm	980 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants
	STEL	500 ppm	1,225 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants
	TWA	200 ppm		US. ACGIH Threshold Limit Values, as amended
	STEL	400 ppm		US. ACGIH Threshold Limit Values, as amended
	STEL	500 ppm	1,225 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	REL	400 ppm	980 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	IDLH	2,000 ppm		US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended
	LEL		2.0 %	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended
	PEL	400 ppm	980 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
Methanol	STEL	250 ppm	325 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	TWA	200 ppm	260 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	STEL	250 ppm	325 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended
	TWA	200 ppm	260 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended
	ST ESL		2,620 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	AN ESL		200 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	AN ESL		262 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	ST ESL		2,000 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	STEL	250 ppm	325 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended
	TWA PEL	200 ppm	260 mg/m3	US. California Code of Regulations, Title 8,

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				Section 5155. Airborne Contaminants, as amended
	Ceiling	1,000 ppm		US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended
	STEL	250 ppm		US. ACGIH Threshold Limit Values, as amended
	TWA	200 ppm		US. ACGIH Threshold Limit Values, as amended
	REL	200 ppm	260 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	STEL	250 ppm	325 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	PEL	200 ppm	260 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
	IDLH	6,000 ppm		US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended
	LEL		6.0 %	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended
Ethanol	AN ESL		1,000 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	ST ESL		10,000 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	AN ESL		1,880 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	ST ESL		18,800 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	STEL	1,000 ppm		US. ACGIH Threshold Limit Values, as amended
	REL	1,000 ppm	1,900 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	IDLH	3,300 ppm		US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended
	LEL		3.3 %	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended
	PEL	1,000 ppm	1,900 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
	TWA	1,000 ppm	1,900 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	TWA	1,000 ppm	1,900 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended
	TWA PEL	1,000 ppm	1,900 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended

Please refer to the latest edition of the appropriate source text and consult an industrial hygienist or similar professional, or local agencies, for further information.

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Biological Limit Values

Chemical name	Parameters / Sampling Time	Exposure Limit Values	Source

Appropriate Engineering Controls Use explosion-proof ventilation equipment. Adequate ventilation should be provided so that exposure limits are not exceeded.

Individual protection measures, such as personal protective equipment

Eye/face protection: Wear safety glasses with side shields (or goggles).

Skin Protection

Hand Protection: Material: Chemical resistant gloves
Additional Information: Wash hands after contact.Material: Suitable gloves can be recommended by the glove supplier.

Skin and Body Protection: Wear a lab coat or similar protective clothing.

Respiratory Protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

Hygiene measures: Observe good industrial hygiene practices.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	According to product specification.
Odor:	Characteristic
Odor Threshold:	No data available.
Freezing point:	No data available.
Boiling Point:	No data available.
Flammability:	No data available.

Upper/lower limit on flammability or explosive limits

Explosive limit - upper:	No data available.
Explosive limit - lower:	No data available.

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Flash Point:	115.7 °F/46.5 °C
Self Ignition Temperature:	No data available.
Decomposition Temperature:	No data available.
pH:	No data available.
Viscosity	
Dynamic viscosity:	Not determined.
Kinematic viscosity:	Not determined.
Flow Time:	No data available.
Solubility(ies)	
Solubility in Water:	Completely Soluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Vapor pressure:	No data available.
Relative density:	No data available.
Density:	No data available.
Bulk density:	No data available.
Relative vapor density:	No data available.

Particle characteristics	
Particle Size:	No data available.
Particle Size Distribution:	No data available.
Specific surface area:	No data available.
Surface charge/Zeta potential:	No data available.
Shape:	No data available.
Crystallinity:	No data available.
Surface treatment:	No data available.

Other information

Metal Corrosion:	Non-corrosive per US Department of Transportation testing protocol.

10. Stability and reactivity

Reactivity:	Material is stable under normal conditions.
Chemical Stability:	Material is stable under normal conditions.

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Possibility of hazardous reactions:	Stable
Conditions to avoid:	Avoid exposure to high temperatures or direct sunlight. Flammable/combustible - Keep away from oxidizers, heat and flames. Keep away from sources of ignition - No smoking.
Incompatible Materials:	Water reactive material.
Hazardous Decomposition Products:	Stable; however, may decompose if heated.

11. Toxicological information

General information: Prolonged exposure to the preparation may cause serious health effects.

Information on toxicological effects

Inhalation:	Limited inhalation hazard at normal work temperatures.
Skin Contact:	Negligible irritation to skin at ambient temperatures.
Eye contact:	Elevated temperatures or mechanical action may form vapors, mist, or fumes which may be irritating to the eyes, nose, throat, or lungs.
Ingestion:	No data available.

Information on likely routes of exposure

Acute toxicity (list all possible routes of exposure)

Oral

Product:	ATEmix: 4,166.67 mg/kg
Components:	
2-Propanol	LD 50 (Rat): 5,045 mg/kg
Methanol	LD 50 (Pig): 5,000 mg/kg
Ethanol	No data available.
Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (1:1)	No data available.

Dermal

Product:	ATEmix: 12,500 mg/kg

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Components:

2-Propanol	No data available.
Methanol	LD 50 (Rabbit): 17,100 mg/kg
Ethanol	LD 50 (Rabbit): 17,100 mg/kg
Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (1:1)	No data available.

Inhalation

Product: ATEmix: 125 mg/l Vapour;

Components:

2-Propanol	No data available.
Methanol	No data available.
Ethanol	LC 50 (Rat, 4 h): 117 - 125 mg/l 2 = reliable with restrictions;
Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (1:1)	No data available.

Repeated dose toxicity

Product: No data available.

Components:

2-Propanol	NOAEL (Rat, Inhalation, >= 104 Weeks): 5,000 ppm(m) Experimental result, Key study Inhalation
Methanol	NOAEL (Mouse(Female, Male), Inhalation, 7,202 - 7,373 h): 0.13 mg/l Experimental result, Weight of Evidence study Inhalation NOAEL (Rat(Male), Inhalation, 1 - 6 Weeks): 2.65 mg/l Experimental result, Supporting study Inhalation NOAEL (Rat(Male), Inhalation): 1.06 mg/l Experimental result, Supporting study Inhalation NOAEL (Rat(Female, Male), Inhalation, 7,318 - 7,496 h): 0.13 mg/l Experimental result, Weight of Evidence study Inhalation LOAEL (Rat(Female, Male), Inhalation, 7,318 - 7,496 h): 1.3 mg/l Experimental result, Weight of Evidence study Inhalation
Ethanol	No data available.
Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (1:1)	No data available.

Skin Corrosion/Irritation

Product: No data available.

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Components:

2-Propanol	No data available.
Methanol	No data available.
Ethanol	
Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (1:1)	No data available.

Serious Eye Damage/Eye Irritation

Product: No data available.

Components:

2-Propanol	No data available.
Methanol	No data available.
Ethanol	No data available.
Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (1:1)	No data available.

Respiratory or Skin Sensitization

Product: No data available.

Components:

2-Propanol	Skin sensitization:, in vivo (Guinea pig): Non sensitising
Methanol	Skin sensitization:, in vivo (Guinea pig): Non sensitising
Ethanol	Based on available data, the classification criteria are not met. Skin sensitization:, in vivo (Guinea pig): Non sensitising
Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (1:1)	No data available.

Carcinogenicity

Product: No data available.

Components:

2-Propanol	No data available.
Methanol	No data available.
Ethanol	Based on available data, the classification criteria are not met.
Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (1:1)	No data available.

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IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (1:1)	Overall evaluation: 2B. Possibly carcinogenic to humans.

ACGIH: US.ACGIH Threshold Limit Values:
No carcinogens present or none present in regulated quantities

US. National Toxicology Program (NTP) Report on Carcinogens:
No carcinogens present or none present in regulated quantities

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:
No carcinogens present or none present in regulated quantities

Germ Cell Mutagenicity

In vitro

Product:	No data available.
Components:	
2-Propanol	No data available.
Methanol	No data available.
Ethanol	Based on available data, the classification criteria are not met.
Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (1:1)	No data available.

In vivo

Product:	No data available.
Components:	
2-Propanol	No data available.
Methanol	No data available.
Ethanol	Based on available data, the classification criteria are not met.
Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (1:1)	No data available.

Reproductive toxicity

Product:	No data available.
Components:	
2-Propanol	No data available.
Methanol	No data available.
Ethanol	Based on available data, the classification criteria are not met.

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Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (1:1)	No data available.

Specific Target Organ Toxicity - Single Exposure

Product:	Causes damage to organs.
Components:	
2-Propanol	No data available.
Methanol	Oral: Nervous System - Causes damage to organs.
Ethanol	Based on available data, the classification criteria are not met.
Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (1:1)	No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product:	No data available.
Components:	
2-Propanol	No data available.
Methanol	No data available.
Ethanol	Based on available data, the classification criteria are not met.
Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (1:1)	No data available.

Aspiration Hazard

Product:	No data available.
Components:	
2-Propanol	No data available.
Methanol	No data available.
Ethanol	No data available.
Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (1:1)	No data available.

Information on health hazards

Other hazards

Product:	No data available.

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12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product:	Expected to be harmful to aquatic organisms.
Components:	
2-Propanol	LC 50 (Pimephales promelas, 96 h): 8,680 mg/l LC 50 (Fathead minnow (Pimephales promelas), 24 h): 11,160 mg/l Mortality LC 50 (Fathead minnow (Pimephales promelas), 96 h): 9,230 - 10,000 mg/l Mortality LC 50 (Bluegill (Lepomis macrochirus), 24 h): > 1,400 mg/l Mortality LC 50 (Fathead minnow (Pimephales promelas), 24 h): 10,600 mg/l Mortality
Methanol	LC 50 (Pimephales promelas, 96 h): 29,400 mg/l EC 50 (Pimephales promelas, 96 h): 28,900 mg/l Experimental result, Supporting study LC 50 (Pimephales promelas, 48 h): 28,400 mg/l Experimental result, Supporting study LC 50 (Pimephales promelas, 96 h): 28,100 mg/l Experimental result, Supporting study LC 50 (Trachinotus carolinus, 24 h): 10,112 mg/l Experimental result, Supporting study
Ethanol	LC 50 (Fathead Minnow, 96 h): 14,200 mg/l LC 50 (Fathead Minnow, 96 h): 15,300 mg/l LC 50 (Oncorhynchus mykiss, 24 h): 11,200 mg/l Experimental result, Supporting study
Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl] methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (1:1)	LC 50 (Medaka, high-eyes (Oryzias latipes), 48 h): 0.1 mg/l Mortality LC 50 (Medaka, high-eyes (Oryzias latipes), 24 h): 0.2 mg/l Mortality

Aquatic Invertebrates

Product:	Expected to be harmful to aquatic organisms.
Components:	
2-Propanol	LC 50 (Water flea (Daphnia magna), 24 h): > 10,000 mg/l Mortality LC 50 (Brine shrimp (Artemia salina), 24 h): > 10,000 mg/l Mortality LC 50 (Common shrimp, sand shrimp (Crangon crangon), 96 h): 750 - 1,650 mg/l Mortality LC 50 (Common shrimp, sand shrimp (Crangon crangon), 48 h): 900 - 1,950 mg/l Mortality
Methanol	No data available.
Ethanol	LC 50 (Water flea (Ceriodaphnia dubia), 48 h): 5,012 mg/l LC 50 (Grass shrimp,freshwater prawn (Palaemonetes kadiakensis), 18 h): 10,100 mg/l

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	LC 50 (Grass shrimp,freshwater prawn (Palaemonetes kadiakensis), 96 h): > 250 mg/l Mortality
Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (1:1)	No data available.

Toxicity to Aquatic Plants

Product:	No data available.
Components:	
2-Propanol	No data available.
Methanol	No data available.
Ethanol	EC 50 (Green algae (Chlorella vulgaris), 72 h): 275 mg/l
Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (1:1)	No data available.

Toxicity to microorganisms

Product:	No data available.
Components:	
2-Propanol	No data available.
Methanol	LC 50 (Turbellarian, flatworm (Dugesia tigrina), 96 h): > 100 mg/l Mortality
Ethanol	LC 50 (Turbellarian, flatworm (Dugesia tigrina), 96 h): > 100 mg/l Mortality
Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (1:1)	No data available.

Chronic hazards to the aquatic environment:

Fish

Product:	Expected to be harmful to aquatic organisms. May cause long-term adverse effects in the environment.
Components:	
2-Propanol	No data available.
Methanol	No data available.
Ethanol	No data available.
Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-	No data available.

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cyclohexadien-1-ylidene]-N-methyl-, chloride (1:1)

Aquatic Invertebrates

Product:	Expected to be harmful to aquatic organisms. May cause long-term adverse effects in the environment.
Components:	
2-Propanol	No data available.
Methanol	No data available.
Ethanol	EC10 (Water flea (Daphnia magna), 10 d): 454 mg/l NOEC (Water flea (Daphnia magna), 10 d): 9.6 mg/l
Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (1:1)	No data available.

Toxicity to Aquatic Plants

Product:	No data available.
Components:	
2-Propanol	No data available.
Methanol	No data available.
Ethanol	No data available.
Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (1:1)	No data available.

Toxicity to microorganisms

Product:	No data available.
Components:	
2-Propanol	No data available.
Methanol	LC 50 (Turbellarian, flatworm (Dugesia tigrina), 96 h): > 100 mg/l Mortality
Ethanol	LC 50 (Turbellarian, flatworm (Dugesia tigrina), 96 h): > 100 mg/l Mortality
Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (1:1)	No data available.

Persistence and Degradability

Biodegradation

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Product:	Expected to be readily biodegradable.
Components:	
2-Propanol	53 % (5 d) Experimental result, Key study Detected in water.
Methanol	84 % Experimental result, Key study Detected in water. 46.3 % (5 d) Experimental result, Supporting study Soil 69 % Experimental result, Key study Detected in water. 71.5 % (5 d) Experimental result, Key study Detected in water. 82.7 % (5 d) Experimental result, Key study Detected in water.
Ethanol	Readily biodegradable 13.6 % (5 d) Soil Read-across from supporting substance (structural analogue or surrogate), Supporting study 89 % (14 d) Detected in water. Experimental result, Supporting study 53.4 % (5 d) Soil Read-across from supporting substance (structural analogue or surrogate), Supporting study 46.3 % (5 d) Soil Read-across from supporting substance (structural analogue or surrogate), Supporting study
Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (1:1)	3.6 % (28 d) Experimental result, Key study Detected in water.

BOD/COD Ratio

Product:	No data available.
Components:	
2-Propanol	No data available.
Methanol	No data available.
Ethanol	No data available.
Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (1:1)	No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product:	No data available.
Components:	
2-Propanol	No data available.
Methanol	Green algae (Chlorella fusca vacuolata), Bioconcentration Factor (BCF): 28,400 (Static)
Ethanol	Potential to bioaccumulate is low.
Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (1:1)	No data available.

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Partition Coefficient n-octanol / water (log Kow)

Product:	No data available.
Components:	
2-Propanol	No data available.
Methanol	Log Kow: -0.77
Ethanol	No data available.
Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (1:1)	No data available.

Mobility in soil:

Product	No data available.
Components:	
2-Propanol	No data available.
Methanol	No data available.
Ethanol	soil - Very mobile liquid
Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (1:1)	No data available.

Results of PBT and vPvB assessment:

Product	No data available.
Components:	
2-Propanol	No data available.
Methanol	No data available.
Ethanol	Not fulfilling PBT (persistent/bioaccumulative/toxic) criteria Not fulfilling vPvB (very persistent/very bioaccummulative) criteria
Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (1:1)	No data available.

Other adverse effects:

Other hazards

Product:	Toxic to aquatic organisms.

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13. Disposal considerations

General information:	Dispose of waste and residues in accordance with local authority requirements. This product is highly flammable. Don't use fire to cut empty container after use.
Disposal methods:	Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
Contaminated Packaging:	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

14. Transport information

DOT

UN number or ID number:	UN 1987
UN Proper Shipping Name:	Alcohols, n.o.s.
Transport Hazard Class(es)	
Class:	3
Label(s):	3
Packing Group:	III
Marine Pollutant:	No
Special precautions for user:	Not regulated.

IMDG

UN number or ID number:	UN 1987
UN Proper Shipping Name:	ALCOHOLS, N.O.S.
Transport Hazard Class(es)	
Class:	3
Subsidiary risk:	3
EmS No.:	F-E, S-D
Packing Group:	III
Environmental Hazards	
Marine Pollutant:	No
Special precautions for user:	Not regulated.

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IATA

UN number or ID number:	UN 1987
Proper Shipping Name:	Alcohols, n.o.s.
Transport Hazard Class(es):	
Class:	3
Subsidiary risk:	3
Packing Group:	III
Environmental Hazards	
Marine pollutant:	No
Special precautions for user:	Not regulated.

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
None present or none present in regulated quantities.

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)
None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended
None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical Identity
2-Propanol
Methanol
Ethanol

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Flammable (gases, aerosols, liquids, or solids), Carcinogenicity, Specific target organ toxicity (single or repeated exposure), Hazards Not Otherwise Classified (HNOC)

US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances
None present or none present in regulated quantities.

US. EPCRA (SARA Title III Section 313 Toxic Chemical Release Inventory (TRI) Reporting

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Chemical Identity	% by weight
2-Propanol	1.0%
Methanol	1.0%

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):
None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)
None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65



WARNING: This product can expose you to chemicals including, Ethanolwhich is [are] known to the State of California to cause cancer and birth defects or other reproductive harm.

This product can expose you to chemicals including, Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (1:1) which is [are] known to the State of California to cause cancer.
This product can expose you to chemicals including, Methanol 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.

US. New Jersey Worker and Community Right-to-Know Act

Chemical Identity
Methanol
Ethanol

US. Massachusetts RTK - Substance List

Chemical Identity
2-Propanol
Methanol
Ethanol

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity
2-Propanol
Methanol
Ethanol

US. Rhode Island RTK

Chemical Identity
2-Propanol
Methanol
Ethanol

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International regulations

Montreal protocol
Not applicable

Stockholm convention
Not applicable

Rotterdam convention
Not applicable

Kyoto protocol
Not applicable

16.Other information, including date of preparation or last revision

Issue Date:	07/04/2022
Version #:	2.3
Further Information:	No data available.
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