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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)
212525	Gram Crystal Violet	No data available

Recommended restrictions

Recommended use: Laboratory Chemicals

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:	Business Unit Product Stewardship Team
E-mail:	IDS_SDS@bd.com

Emergency telephone number: CHEMTREC 1 800 424 9300

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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

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.

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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.

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.

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

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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	0.3%

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

4. First-aid measures

Description of 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 if you feel unwell: Call a POISON CENTER or doctor.

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.

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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.
Accidental release measures:	No data available.

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Methods and material for containment and cleaning up:	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:	No data available.
Local/Total ventilation:	No data available.
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

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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	OSHA Z1A
	STEL	500 ppm	1,225 mg/m3	OSHA Z1A
	TWA	400 ppm	980 mg/m3	TN OEL
	STEL	500 ppm	1,225 mg/m3	TN OEL
	AN ESL		200 ppb	TX ESL
	ST ESL		2,000 ppb	TX ESL
	AN ESL		492 µg/m3	TX ESL
	ST ESL		4,920 µg/m3	TX ESL
	TWA PEL	400 ppm	980 mg/m3	US CA OEL
	STEL	500 ppm	1,225 mg/m3	US CA OEL
	TWA	200 ppm		ACGIH
	STEL	400 ppm		ACGIH
	STEL	500 ppm	1,225 mg/m3	NIOSH
	REL	400 ppm	980 mg/m3	NIOSH

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	IDLH	2,000 ppm		NIOSH IDLH
	LEL		2.0 %	NIOSH IDLH
	PEL	400 ppm	980 mg/m3	OSHA Z1
Methanol	STEL	250 ppm	325 mg/m3	OSHA Z1A
	TWA	200 ppm	260 mg/m3	OSHA Z1A
	STEL	250 ppm	325 mg/m3	TN OEL
	TWA	200 ppm	260 mg/m3	TN OEL
	ST ESL		2,620 µg/m3	TX ESL
	AN ESL		200 ppb	TX ESL
	AN ESL		262 µg/m3	TX ESL
	ST ESL		2,000 ppb	TX ESL
	STEL	250 ppm	325 mg/m3	US CA OEL
	TWA PEL	200 ppm	260 mg/m3	US CA OEL
	Ceiling	1,000 ppm		US CA OEL
	STEL	250 ppm		ACGIH
	TWA	200 ppm		ACGIH
	REL	200 ppm	260 mg/m3	NIOSH
	STEL	250 ppm	325 mg/m3	NIOSH
	PEL	200 ppm	260 mg/m3	OSHA Z1
	IDLH	6,000 ppm		NIOSH IDLH
	LEL		6.0 %	NIOSH IDLH
Ethanol	AN ESL		1,000 ppb	TX ESL
	ST ESL		10,000 ppb	TX ESL
	AN ESL		1,880 µg/m3	TX ESL
	ST ESL		18,800 µg/m3	TX ESL
	STEL	1,000 ppm		ACGIH
	REL	1,000 ppm	1,900 mg/m3	NIOSH

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	IDLH	3,300 ppm		NIOSH IDLH
	LEL		3.3 %	NIOSH IDLH
	PEL	1,000 ppm	1,900 mg/m3	OSHA Z1
	TWA	1,000 ppm	1,900 mg/m3	OSHA Z1A
	TWA	1,000 ppm	1,900 mg/m3	TN OEL
	TWA PEL	1,000 ppm	1,900 mg/m3	US CA OEL

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.

Biological Limit Values

No biological exposure limits noted for the ingredient(s).

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.

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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

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Explosive limit - upper:	No data available.
Explosive limit - lower:	No data available.
Flash Point:	109 °F/43 °C
Autoignition Temperature:	No data available.
Decomposition Temperature:	No data available.
pH:	No data available.

Viscosity

Dynamic viscosity:	Not determined.
Kinematic viscosity:	No data available.
Flow Time:	No data available.

Solubility(ies)

Solubility in Water:	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.
Vapor density (air=1):	No data available.

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Other information

No data available

10. Stability and reactivity

Reactivity:	Material is stable under normal conditions.
Chemical Stability:	Material is stable under normal conditions.
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: Possible human cancer hazard.

Information on likely routes of exposure

Inhalation: Limited inhalation hazard at normal work temperatures.

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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:	In the event of inhalation (ingestion), seek medical attention immediately

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

Components:

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2-Propanol	No data available.
Methanol	LD 50, Rabbit, 17,100 mg/kg, 4 = not assignable
Ethanol	LD 50, Rabbit, 17,100 mg/kg, 4 = not assignable
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

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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	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.

Skin Corrosion/Irritation

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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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: May cause cancer.

Components:

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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.

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

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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

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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.

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

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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

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Product: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: The product contains a substance which is harmful to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

Components:

2-Propanol	LC 50, Pimephales promelas, 96 h, 8,680 mg/lAcute toxicity
	LC 50, Fathead minnow (Pimephales promelas), 24 h, 11,160 mg/lStatic, Mortality
	LC 50, Fathead minnow (Pimephales promelas), 96 h, 9,230 - 10,000 mg/lFlow through, Mortality
	LC 50, Bluegill (Lepomis macrochirus), 24 h, > 1,400 mg/lStatic, Mortality
	LC 50, Fathead minnow (Pimephales promelas), 24 h, 10,600 mg/lFlow through, Mortality
Methanol	LC 50, Pimephales promelas, 96 h, 29,400 mg/lAcute toxicity
	EC 50, Pimephales promelas, 96 h, 28,900 mg/lflow-through, Experimental result, Supporting study
	LC 50, Pimephales promelas, 48 h, 28,400 mg/lflow-through, Experimental result, Supporting study
	LC 50, Pimephales promelas, 96 h, 28,100 mg/lflow-through, Experimental result, Supporting study

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	LC 50, Trachinotus carolinus, 24 h, 10,112 mg/lStatic, 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/lflow-through, 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/lStatic, Mortality
	LC 50, Medaka, high-eyes (Oryzias latipes), 24 h, 0.2 mg/lStatic, Mortality

Aquatic Invertebrates

Product: The product contains a substance which is harmful to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

Components:

2-Propanol	LC 50, Water flea (Daphnia magna), 24 h, > 10,000 mg/lStatic, Mortality
	LC 50, Brine shrimp (Artemia salina), 24 h, > 10,000 mg/lStatic, Mortality
	LC 50, Common shrimp, sand shrimp (Crangon crangon), 96 h, 750 - 1,650 mg/lRenewal, Mortality
	LC 50, Common shrimp, sand shrimp (Crangon crangon), 48 h, 900 - 1,950 mg/lRenewal, 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/lStatic, 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:	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, Green algae (Chlorella vulgaris), 72 h, 11.5 mg/l
	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

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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: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic 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-cyclohexadien-1-ylidene]-N-methyl-, chloride (1:1)	No data available.

Aquatic Invertebrates

Product: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Components:

2-Propanol	No data available.

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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 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:	The degradability of the product has not been stated.
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.

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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), 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.

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Components:

2-Propanol	No data available.
Methanol	-0.77

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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.

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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: Dangerous for the environment: May cause long-term adverse effects in the aquatic environment.

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.

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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.(Ethanol, Methanol, isopropanol)
Transport Hazard Class(es)	
Class:	3
Label(s):	3
Packing Group:	III
Limited quantity:	5.00 L

Environmental Hazards

Environmentally Hazardous:	No
Marine Pollutant:	No

IATA

UN number or ID number:	UN 1987
UN Proper Shipping Name:	ALCOHOLS, N.O.S.(Ethanol, Methanol, isopropanol)
Transport Hazard Class(es)	
Class:	3
Label(s):	3
Packing Group:	III
Passenger and cargo aircraft :	355

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Limited quantity	None.

Environmental Hazards

Environmentally Hazardous:	No
Marine Pollutant:	No

Special precautions for user: PG

Passenger and cargo aircraft:	Allowed. 355
Cargo aircraft only :	Allowed. 366

IMDG

UN number or ID number:	UN 1987
UN Proper Shipping Name:	ALCOHOLS, N.O.S.(Ethanol, Methanol, isopropanol)

Transport Hazard Class(es)

Class:	3
Label(s):	3
EmS No.:	F-E, S-D
Packing Group:	III
Limited quantity	5.00L

Environmental Hazards

Environmentally Hazardous:	No
Marine Pollutant:	No

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Special precautions for user: PG

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

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.

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CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical Identity
RCRA HAZARDOUS WASTE NO. D001
METHANOL
RCRA HAZARDOUS WASTE NO. D001

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

Chemical Identity	% by weight
Isopropyl alcohol (Isopropanol) (only persons who manufacture by the strong acid process are subject, no supplier notification)	1.0%
METHANOL	1.0%

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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, Ethanol which 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.

International regulations

Montreal protocol

Not applicable

Stockholm convention

Not applicable

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Rotterdam convention

Not applicable

Kyoto protocol

Not applicable

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

Issue Date: 04/18/2014

Version #: 2.5

Abbreviations and acronyms:

:	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants
:	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A
ACGIH:	US. ACGIH Threshold Limit Values, as amended
NIOSH IDLH:	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended
NIOSH/GUIDE:	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
OSHA_TRANS:	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
TN OEL:	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended
TX ESL:	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
US CA OEL:	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended

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Z1A:	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
/ STEL:	Short Term Exposure Limit (STEL):
/ TWA PEL:	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):
/ STEL:	Short Term Exposure Limit (STEL):
/ TWA:	Time Weighted Average (TWA):
ACGIH / STEL:	Short Term Exposure Limit (STEL):
ACGIH / TWA:	Time Weighted Average (TWA):
NIOSH IDLH / LEL:	Lower Explosive Limit (LEL):
NIOSH IDLH / IDLH:	Immediately dangerous to life or health (IDLH) concentration:
NIOSH/GUIDE / REL:	Recommended exposure limit (REL):
NIOSH/GUIDE / STEL:	Short Term Exposure Limit (STEL):
OSHA_TRANS / PEL:	Permissible exposure limit:
TN OEL / STEL:	Short Term Exposure Limit (STEL):
TN OEL / TWA:	Time Weighted Average (TWA):
TX ESL / ST ESL:	Short-Term ESL:
TX ESL / AN ESL:	Annual ESL:
US CA OEL / Ceiling:	Ceiling Limit Value:
US CA OEL / STEL:	Short Term Exposure Limit (STEL):
US CA OEL / TWA PEL:	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):
Z1A / STEL:	Short Term Exposure Limit (STEL):
Z1A / TWA:	Time Weighted Average (TWA):

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS -

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Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Further Information: No data available.

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