Aerospray® Gram Reagent C, Crystal Violet Concentrate

Safety Data Sheet

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

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Product name : Aerospray® Gram Reagent C, Crystal Violet Concentrate
Product code : SS-141C

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Laboratory chemical
Recommended use : Professional use only

1.4. Supplier's details

ELITechGroup Inc.
370 West 1700 South
Logan, UT, Cache, 84321
USA
T +1 (435) 752-6011 - F +1 (435) 752-4127
qara_ebs@elitechgroup.com - www.elitechgroup.com

1.5. Emergency phone number

Emergency number : Contact your distributor or poison control center in your country.
InfoTrac Emergency Response: Calls within the USA, phone: 1-800-535-5053. Calls outside the USA, phone: +1 352-323-3500 (call collect)
Customer ID: #90104 (NOTE: this number is required when a customer calls into either phone number above).

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Acute toxicity (oral), Category 4	H302	Harmful if swallowed.
Serious eye damage/eye irritation, Category 1	H318	Causes serious eye damage.
Skin sensitization, Category 1	H317	May cause an allergic skin reaction.
Carcinogenicity, Category 2	H351	Suspected of causing cancer (oral).
Specific target organ toxicity — Single exposure, Category 1	H370	Causes damage to organs (oral).
Specific target organ toxicity — Repeated exposure, Category 2	H373	May cause damage to organs through prolonged or repeated exposure.

Full text of H statements : see section 16

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US)	:	Danger
Hazard statements (GHS US)	:	H302 - Harmful if swallowed H317 - May cause an allergic skin reaction H318 - Causes serious eye damage H351 - Suspected of causing cancer (oral). H370 - Causes damage to organs (oral). H373 - May cause damage to organs through prolonged or repeated exposure
Precautionary statements (GHS US)	:	P201 - Obtain special instructions before use. P260 - Do not breathe mist, spray, vapors, fume. P264 - Wash hands thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P272 - Contaminated work clothing must not be allowed out of the workplace. P280 - Wear protective gloves, protective clothing, eye protection. P301+P312 - If swallowed: Call a doctor, a POISON CENTER if you feel unwell. P302+P352 - If on skin: Wash with plenty of water. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P311 - If exposed or concerned: Call a doctor, a POISON CENTER. P330 - Rinse mouth. P333+P313 - If skin irritation or rash occurs: Get medical advice or attention. P362+P364 - Take off contaminated clothing and wash it before reuse. P501 - Dispose of hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
ethylene glycol	CAS-No.: 107-21-1	10 – 40	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
methanol	CAS-No.: 67-56-1	1 – 10	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Acute Tox. 3 (Inhalation:vapour), H331 STOT SE 1, H370

Name	Product identifier	%	GHS US classification
benzyl alcohol	CAS-No.: 100-51-6	1 – 8	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Eye Irrit. 2, H319 Skin Sens. 1B, H317
C.I. basic violet 3 (Crystal Violet)	CAS-No.: 548-62-9	1 – 6	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 Carc. 2, H351
Diazolidinyl urea	CAS-No.: 78491-02-8	1 – 5	Eye Irrit. 2, H319 STOT RE 2, H373

Full text of hazard classes and H-statements : see section 16

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention. Call a poison center/doctor/physician if you feel unwell.

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash skin with plenty of water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a POISON CENTER or doctor/physician if you feel unwell.

Personal protection for first-aid responders. : First-aiders should consider self-protection and use the recommended personal protective equipment (see section 8).

4.2. Most important symptoms/effects, acute and delayed

Potential Adverse human health effects and symptoms : Harmful if swallowed.

Symptoms/effects after inhalation : May cause an allergic skin reaction.

Symptoms/effects after skin contact : May cause an allergic skin reaction.

Symptoms/effects after eye contact : Causes serious eye damage. Serious damage to eyes.

Symptoms/effects after ingestion : Swallowing a small quantity of this material will result in serious health hazard. Harmful if swallowed.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : No fire hazard.

Explosion hazard : No direct explosion hazard.

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment. Do not enter fire area without proper protective equipment, including respiratory protection.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. Avoid breathing dust/fume/gas/mist/vapors/spray. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Ventilate area. Evacuate unnecessary personnel. Stop leak if safe to do so.

Environmental precautions : Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.2. Methods and materials for containment and cleaning up

For containment : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.

Methods for cleaning up : Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. 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 vapor. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Wear personal protective equipment. Avoid contact with skin and eyes.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Always wash hands after handling the product.

Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.

7.2. Conditions for safe storage, including incompatibilities

Technical measures : Keep in a cool, well-ventilated place away from heat.

Storage conditions : Keep only in original container. Keep container closed when not in use. Store in a well-ventilated place. Keep cool.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

Packaging materials : Always store product in container of same material as original container.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

ethylene glycol (107-21-1)	
USA - ACGIH® - Threshold Limit Values	
Local name	Ethylene glycol
ACGIH® TLV® TWA	25 ppm (Vapor fraction)
ACGIH® TLV® STEL	10 mg/m³ (Inhalable fraction, Aerosol only)
	50 ppm (Vapor fraction)
Remark (ACGIH®)	URT & eye irr
Regulatory reference	ACGIH 2025

methanol (67-56-1)	
USA - ACGIH® - Threshold Limit Values	
Local name	Methanol
ACGIH® TLV® TWA	262 mg/m³
	200 ppm
ACGIH® TLV® STEL	328 mg/m³
	250 ppm
Remark (ACGIH®)	Headache; eye dam; dizziness; nausea
Regulatory reference	ACGIH 2025
USA - ACGIH® - Biological Exposure Indices	
Local name	Methanol
BEI (BLV)	15 mg/l Parameter: Methanol - Medium: urine - Sampling time: End of shift - Notations: B, Ns
Regulatory reference	ACGIH 2025
USA - OSHA - Occupational Exposure Limits	
Local name	Methyl alcohol
OSHA PEL TWA	260 mg/m³

methanol (67-56-1)	
	200 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:
Avoid all unnecessary exposure.

Materials for protective clothing:
Wear protective clothing

Hand protection:				
Wear protective gloves				
Type	**Material**	**Permeation**	**Thickness (mm)**	**Penetration**
Disposable gloves	Latex, Nitrile rubber (NBR)	3 (> 60 minutes)	0.1 - 0.15	

Eye protection:
Chemical goggles or safety glasses

Skin and body protection:
Wear suitable protective clothing

Respiratory protection:
Wear suitable respiratory equipment in case of insufficient ventilation

Personal protective equipment symbol(s):



Other information:
Do not eat, drink or smoke during use.

SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state : Liquid
Color : Purple
Odor : Characteristic
Odor threshold : No data available
pH : No data available
Melting point : Not applicable
Freezing point : No data available
Boiling point : No data available

Flash point	:	> 93.3 °C
Flammability (solid, gas)	:	Non flammable.
Vapor pressure	:	No data available
Relative vapor density at 20°C	:	No data available
Relative density	:	No data available
Solubility	:	Soluble in water. Water: No data available
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity, kinematic	:	No data available
Explosion limits	:	No data available
Particle characteristics	:	No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	:	Harmful if swallowed.
Acute toxicity (dermal)	:	Not classified
Acute toxicity (inhalation)	:	Not classified

Aerospray® Gram Reagent C, Crystal Violet Concentrate	
ATE US (oral)	803.734 mg/kg body weight

benzyl alcohol (100-51-6)	
LD50 oral rat	1230 mg/kg (Rat; Experimental value)

benzyl alcohol (100-51-6)	
LD50 dermal rabbit	> 2000 mg/kg body weight (EPA OTS 798.1100, 24 h, Rabbit, Male / female, Experimental value, Dermal, 14 day(s))
ATE US (oral)	1230 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h

ethylene glycol (107-21-1)	
LD50 oral rat	7712 mg/kg body weight (according to BASF-internal standards, Rat, Male / female, Experimental value, Aqueous solution, Oral, 7 day(s))
LD50 oral	493.91 mg/kg (Estimated)
LD50 dermal	> 3500 mg/kg body weight (Mouse, Male / female, Experimental value, Dermal)
ATE US (oral)	493.91 mg/kg body weight

C.I. basic violet 3 (548-62-9)	
LD50 oral rat	420 mg/kg (Rat, Experimental value, Oral)
LD50 dermal rabbit	> 2000 mg/kg body weight (Equivalent or similar to OECD 402, Rabbit, Experimental value, Dermal)
ATE US (oral)	420 mg/kg body weight

methanol (67-56-1)	
LD50 oral rat	1187 – 2769 mg/kg body weight (BASF test, Rat, Male / female, Experimental value, 15-35 % aqueous solution, Oral, 7 day(s))
LD50 oral	101.01 mg/kg (Acute toxicity, Oral, Estimate)
LC50 Inhalation - Rat	3.03 mg/l air (BASF test, 4 h, Rat, Male / female, Experimental value, Inhalation (vapours))
ATE US (oral)	101.01 mg/kg body weight
ATE US (dermal)	300 mg/kg body weight
ATE US (gases)	700 ppmV/4h
ATE US (vapors)	3.03 mg/l/4h
ATE US (dust, mist)	3.03 mg/l/4h

Diazolidinyl urea (78491-02-8)	
LD50 oral rat	2600 mg/kg
LD50 dermal rabbit	> 2000 mg/kg body weight Animal: rabbit, Guideline: EPA OPPTS 870.1200 (Acute Dermal Toxicity)
ATE US (oral)	2600 mg/kg body weight

Skin corrosion/irritation : Not classified

benzyl alcohol (100-51-6)	
pH	No data available in the literature

ethylene glycol (107-21-1)	
pH	No data available in the literature

C.I. basic violet 3 (548-62-9)	
pH	3.07 (5 - 10 %, 27 °C, OECD 105: Water Solubility)

methanol (67-56-1)	
pH	No data available in the literature

Serious eye damage/irritation : Causes serious eye damage.

benzyl alcohol (100-51-6)	
pH	No data available in the literature

ethylene glycol (107-21-1)	
pH	No data available in the literature

C.I. basic violet 3 (548-62-9)	
pH	3.07 (5 - 10 %, 27 °C, OECD 105: Water Solubility)

methanol (67-56-1)	
pH	No data available in the literature

Respiratory or skin sensitization : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified

Carcinogenicity : Suspected of causing cancer (oral).

ethylene glycol (107-21-1)	
NOAEL (chronic,oral,animal/male,2 years)	1500 mg/kg body weight Animal: mouse, Animal sex: male, Remarks on results: other: effect type: carcinogenicity (migrated information)

Reproductive toxicity : Not classified

methanol (67-56-1)	
NOAEL (animal/male, F0/P)	< 1000 mg/kg body weight (Animal: mouse, Animal sex: male)

STOT-single exposure : Causes damage to organs (oral).

methanol (67-56-1)	
STOT-single exposure	Causes damage to organs.

STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

benzyl alcohol (100-51-6)	
NOAEL (oral,rat,90 days)	400 mg/kg body weight Animal: rat, Guideline: other:OECD Guideline 451 (Carcinogenicity Studies)

ethylene glycol (107-21-1)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Diazolidinyl urea (78491-02-8)	
NOAEL (dermal,rat/rabbit,90 days)	200 mg/kg body weight Animal: rabbit
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

benzyl alcohol (100-51-6)	
Viscosity, kinematic	No data available in the literature
ethylene glycol (107-21-1)	
Viscosity, kinematic	18.86 mm²/s (20 °C)
C.I. basic violet 3 (548-62-9)	
Viscosity, kinematic	Not applicable (solid)
methanol (67-56-1)	
Viscosity, kinematic	0.68 – 0.747 mm²/s

Potential Adverse human health effects and symptoms : Harmful if swallowed.
Symptoms/effects after inhalation : May cause an allergic skin reaction.
Symptoms/effects after skin contact : May cause an allergic skin reaction.
Symptoms/effects after eye contact : Causes serious eye damage. Serious damage to eyes.
Symptoms/effects after ingestion : Swallowing a small quantity of this material will result in serious health hazard. Harmful if swallowed.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short–term (acute) : Not classified
Hazardous to the aquatic environment, long–term (chronic) : Not classified

benzyl alcohol (100-51-6)	
LC50 - Fish [1]	460 mg/l (EPA OPP 72-1, 96 h, Pimephales promelas, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	230 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Fresh water, Experimental value, Locomotor effect)
EC50 72h - Algae [1]	770 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	500 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
ErC50 algae	770 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
NOEC (chronic)	51 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
ethylene glycol (107-21-1)	
LC50 - Fish [1]	> 72860 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	> 100 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, Daphnia magna, Static system, Fresh water, Experimental value)
EC50 96h - Algae [1]	3536 mg/l Test organisms (species): other: green algae

ethylene glycol (107-21-1)	
NOEC (chronic)	≥ 1000 mg/l Test organisms (species): Americamysis bahia (previous name: Mysidopsis bahia) Duration: '23 d'

C.I. basic violet 3 (548-62-9)	
LC50 - Fish [1]	0.082 mg/l (96 h, Pimephales promelas, Static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	0.24 – 0.5 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	0.025 – 0.8 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
ErC50 algae	0.025 – 0.8 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Estimated value)

methanol (67-56-1)	
LC50 - Fish [1]	15400 mg/l (EPA 660/3 - 75/009, 96 h, Lepomis macrochirus, Flow-through system, Fresh water, Experimental value, Lethal)
EC50 - Crustacea [1]	18260 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 96 h, Daphnia magna, Semi-static system, Fresh water, Experimental value, Locomotor effect)
EC50 96h - Algae [1]	22000 mg/l (OECD 201: Alga, Growth Inhibition Test, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Growth rate)
NOEC (chronic)	208 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

Diazolidinyl urea (78491-02-8)	
LC50 - Fish [1]	> 67 mg/l Test organisms (species): Lepomis macrochirus
EC50 - Crustacea [1]	58 mg/l Test organisms (species): Daphnia magna
LC50 - Fish [2]	> 150 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 72h - Algae [1]	5.78 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

12.2. Persistence and degradability

Aerospray® Gram Reagent C, Crystal Violet Concentrate	
Persistence and degradability	May cause long-term adverse effects in the environment.

benzyl alcohol (100-51-6)	
Persistence and degradability	Biodegradable in the soil, Readily biodegradable in water.

ethylene glycol (107-21-1)	
Persistence and degradability	Biodegradable in the soil, Readily biodegradable in water, Not established.
Biochemical oxygen demand (BOD)	0.47 g O_2/g substance
Chemical oxygen demand (COD)	1.24 g O_2/g substance
ThOD	1.29 g O_2/g substance

C.I. basic violet 3 (548-62-9)	
Persistence and degradability	Not readily biodegradable in water.

methanol (67-56-1)	
Persistence and degradability	Readily biodegradable in the soil, Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.6 – 1.1 g O_2/g substance
Chemical oxygen demand (COD)	1.4 g O_2/g substance
ThOD	1.5 g O_2/g substance

Diazolidinyl urea (78491-02-8)	
Persistence and degradability	Rapidly degradable

12.3. Bioaccumulative potential

Aerospray® Gram Reagent C, Crystal Violet Concentrate	
Bioaccumulative potential	Not established.

benzyl alcohol (100-51-6)	
BCF - Fish [1]	1.4 l/kg (BCFBAF v3.01, Estimated value)
Partition coefficient n-octanol/water (Log Pow)	1 – 1.1 (Experimental value, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

ethylene glycol (107-21-1)	
Partition coefficient n-octanol/water (Log Pow)	-1.36 (Experimental value)
Bioaccumulative potential	Not bioaccumulative. Not established.

C.I. basic violet 3 (548-62-9)	
BCF - Fish [1]	3.8 – 16 l/kg (6 week(s), Cyprinus carpio, Static system, Fresh water, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	1.172 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

methanol (67-56-1)	
BCF - Fish [1]	1 – 4.5 (72 h, Cyprinus carpio, Static system, Fresh water, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	-0.77 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

benzyl alcohol (100-51-6)	
Surface tension	39 mN/m (20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.1 – 1.3 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Highly mobile in soil.

ethylene glycol (107-21-1)	
Surface tension	48.4 mN/m (20 °C)

ethylene glycol (107-21-1)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0 (log Koc, SRC PCKOCWIN v2.0, QSAR)
Ecology - soil	Highly mobile in soil.

C.I. basic violet 3 (548-62-9)	
Surface tension	44.2 mN/m (1 %)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	5.79 (log Koc, Experimental value)
Ecology - soil	Adsorbs into the soil.

methanol (67-56-1)	
Surface tension	No data available in the literature
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	-0.89 – -0.21 (log Koc, Calculated value)
Ecology - soil	Highly mobile in soil.

12.5. Other adverse effects

Ozone : Not classified
Fluorinated greenhouse gases : No

Other information : Avoid release to the environment.

SECTION 13 Disposal considerations

Regional waste regulation : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. Disposal must be done according to official regulations.
Additional information : Do not re-use empty containers.
Ecological waste information : Avoid release to the environment.

SECTION 14 Transport information

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

UN-No. (DOT) : Not regulated
UN-No. (TDG) : Not regulated
UN-No. (IMDG) : 3082
UN-No. (IATA) : 3082

14.2. UN Proper Shipping Name

Proper Shipping Name (DOT) : Not regulated
Proper Shipping Name (TDG) : Not regulated
Proper Shipping Name (IMDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (C.I. Basic Violet 3 solution)

Proper Shipping Name (IATA) : Environmentally hazardous substance, liquid, n.o.s. (C.I. Basic Violet 3 solution)

14.3. Transport hazard class(es)

DOT
Transport hazard class(es) (DOT) : Not regulated

TDG
Transport hazard class(es) (TDG) : Not regulated

IMDG
Transport hazard class(es) (IMDG) : 9
Hazard labels (IMDG) : 9



IATA
Transport hazard class(es) (IATA) : 9
Hazard labels (IATA) : 9



14.4. Packing group

Packing group (DOT) : Not regulated
Packing group (TDG) : Not regulated
Packing group (IMDG) : III
Packing group (IATA) : III

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT
Not regulated

TDG
Not regulated

IMDG
Special provision (IMDG) : 274, 335, 375, 969
Limited quantities (IMDG) : 5 L
Excepted quantities (IMDG) : E1
Packing instructions (IMDG) : LP01, P001
Packing provisions (IMDG) : PP1
IBC packing instructions (IMDG) : IBC03
Tank instructions (IMDG) : T4
Tank special provisions (IMDG) : TP1, TP29
EmS-No. (Fire) : F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE

EmS-No. (Spillage) : S-F - SPILLAGE SCHEDULE Foxtrot - WATER-SOLUBLE MARINE POLLUTANTS
Stowage category (IMDG) : A

IATA

Special provision (IATA) : A97, A158, A197, A215
PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y964
PCA limited quantity max net quantity (IATA) : 30kgG
PCA packing instructions (IATA) : 964
PCA max net quantity (IATA) : 450L
CAO packing instructions (IATA) : 964
CAO max net quantity (IATA) : 450L
ERG code (IATA) : 9L

SECTION 15 Regulatory information

15.1. Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

ethylene glycol	CAS-No. 107-21-1	10 – 40%
methanol	CAS-No. 67-56-1	1 – 10%

ethylene glycol (107-21-1)

Listed on EPA Hazardous Air Pollutant (HAPS)
Listed on EPA HAPs Chronic Dose Response Assessment List - Carcinogens
Listed on EPA HAPs Acute Dose Response Assessment List – Exposure limits

CERCLA RQ	5000 lb

methanol (67-56-1)

Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ	5000 lb

15.2. International regulations

CANADA

ethylene glycol (107-21-1)

Listed on the Canadian DSL (Domestic Substances List)

C.I. basic violet 3 (548-62-9)

Listed on the Canadian DSL (Domestic Substances List)

methanol (67-56-1)

Listed on the Canadian DSL (Domestic Substances List)

Diazolidinyl urea (78491-02-8)
Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

ethylene glycol (107-21-1)
Listed on EPA HAPs Chronic Dose Response Assessment List - Carcinogens Listed on EPA HAPs Acute Dose Response Assessment List – Exposure limits Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. State regulations

WARNING: This product can expose you to chemicals including Crystal Violet, which is known to the State of California to cause cancer, and ethylene glycol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Component	State or local regulations
benzyl alcohol(100-51-6)	U.S. - Massachusetts - Right To Know List; U.S. - Pennsylvania - RTK (Right to Know) List
ethylene glycol(107-21-1)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List
methanol(67-56-1)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16 Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Other information : None.

Full text of hazard classes and H-statements	
H225	Highly flammable liquid and vapor
H301	Toxic if swallowed
H302	Harmful if swallowed
H311	Toxic in contact with skin
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H331	Toxic if inhaled
H332	Harmful if inhaled
H351	Suspected of causing cancer.
H370	Causes damage to organs.

Full text of hazard classes and H-statements	
H373	May cause damage to organs through prolonged or repeated exposure

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

Reason for change: updating to latest format and company header logo.

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