



Section 1. Product and Preparation Information

Product Identifier
Tissue Marking Dye, Black

Product Use
Margin Identification

Date Prepared
Dec. 2009

Synonyms / Chemical Name
None

Reorder Number(s):
BG020, BG021

Manufacturer/ Preparer

Emergency Contact
Chemtec USA and Canada 800.424.9300

Section 2. Protective Measures



Personal Protection

Eyes: Goggles

Hands: Latex or nitrile gloves

Body: Laboratory coat

Respiratory Wear: approved/certified respirator
if airborne concentrations exceed exposure limits



Section 3. Hazardous Ingredients

Hazardous Ingredient	% wt.	CAS Number	LD50	LC50	TDG PIN
Ammonium Hydroxide	< 5	1336-21-6	N/A	N/A	N/A
Black Pigment Dispersion	< 15	1333-86-4	N/A	N/A	N/A
Isopropyl Alcohol	< 3	67-63-0	N/A	N/A	N/A

Section 4. First Aid Measures

Eye Contact: Flush eyes with flowing water for at least 15 minutes

Skin Contact: Wash skin with deluge of water for at least 15 minutes

Ingestion: Induce vomiting as directed by medical personnel

Inhalation: If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get medical attention.

Section 5. Physical Data

Physical State Liquid	Appearance Black, slightly viscous liquid	Odor Threshold (ppm) N/A	Solubility Soluble in water	Auto-ignition Temp N/A
Vapor Pressure <1 mm Hg 25C	Vapor Density (air=1): 2.62	Evaporation Rate N/A	Boiling Point over 200°F	Flash Point CC over 200°F
pH 8.5-10	Specific Gravity 1.02-1.14	Coeff. Water/oil Dist. N/A	Melting Point N/A	Flammable Limits UEL- N/A LEL- N/A
Volatility/Vol (%) 60-70%	Flame Propagation Rate N/A	Flammability Classification N/A		

Section 6. Means to Extinguish

Flammability
N/A

Conditions
N/A

Fl. Pt - Auto Ignition - Flammable Limits
Fl. Pt—2.6/12.5% by volume

Explosivity
Not explosive under normal conditions of use. Vapors are heavier than air and may settle in low areas. Vapors may travel long distances to an ignition source and flash back explosively. Flame may be invisible. Not sensitive to impact. Probably will not accumulate static charge due to high electrical conductivity; however proper grounding during transfer is recommended.

Hazardous Combustion Products
N/A

Means to Extinguish
Small fire, use dry chemical powder. Large fire, use alcohol foam or fog

Section 7. Reactivity

Stability
Stable

Conditions to avoid
Temperature extremes

Hazardous Decomposition Products
Oxides of carbon (mono, di)

Conditions of Reactivity
N/A

Hazardous Polymerization
Will not occur

Incompatibility
Oxidizers

Section 8. Toxicological Properties

Routes of Entry Absorbed through the skin, eyes, inhalation and ingestion

Target Organs N/A

Effects of Acute Exposure

Eye	May cause redness or irritation
Skin	Prolonged use may cause irritation or defatting
Absorption	May be absorbed through the skin, eyes
Inhalation	Slightly hazardous if inhaled
Ingestion	May cause blindness, nausea, damage to GI tract

Effects of Chronic Exposure Breathing of vapors may cause nasal and respiratory irritation, nausea, headaches, dizziness, pulmonary edema and pneumonitis. May cause damage to central nervous system. Prolonged use may cause skin irritation or defatting.

Carcinogenic Effects
N/A

Reproductive Toxicity
N/A

Teratogenic and Mutagenic Effects
N/A

Exposure Limits	OSHA PEL TWA	ACGIH TLV TWA	STEL	TWAEV (Ont.)	STEV (Ont.)	CEV (Ont.)
Ammonium Hydroxide	N/A	N/A	N/A	N/A	N/A	N/A
Black Pigment Dispersion	3.5mg	3.5mg	N/A	N/A	N/A	N/A
Isopropyl Alcohol	N/A	400ppm	N/A	N/A	N/A	N/A

Section 9. Regulatory Information

OSHA Hazardous
Non hazardous

Cal. Prop. 65
Not listed

Canadian WHMIS
N/A

RCRA Regulated
N/A

SARA 302/304
Not listed

SARA 313
Not listed

CERCLA 102A
Not listed

RQ
N/A

CWA 307
N/A

CWA 311
N/A

CAA 112 Release Prevention
N/A

CAA 112 Reg. Flam. Substance
N/A

CAA 112 Reg. Toxic Substance
N/A

TSCA Inventory
Listed

EEC Flammability
Not flammable

CEPA DSL
N/A

Proper US DOT Shipping Name
Not regulated

TDG Classification
Not listed

IATA Classification
Not listed

Limited Quantity
No

The information provided above is based upon unused product. Product characteristics may change after use, requiring further classification.



Section 1. Product and Preparation Information

Product Identifier
Tissue Marking Dye, Blue

Product Use
Margin Identification

Date Prepared
Dec. 2009

Synonyms / Chemical Name
None

Reorder Number(s):
BG020, BG022

Manufacturer/ Preparer

Emergency Contact
Chemtec USA and Canada 800.424.9300

Section 2. Protective Measures



Personal Protection

Eyes: Goggles

Hands: Latex or nitrile gloves

Body: Laboratory coat

Respiratory Wear: approved/certified respirator
if airborne concentrations exceed exposure limits



Section 3. Hazardous Ingredients

Hazardous Ingredient	% wt.	CAS Number	LD50	LC50	TDG PIN
Ammonium Hydroxide	< 5	1336-21-6	N/A	N/A	N/A
Blue Pigment Dispersion	< 15	147-14-8	N/A	N/A	N/A
Isopropyl Alcohol	< 3	67-63-0	N/A	N/A	N/A

Section 4. First Aid Measures

Eye Contact: Flush eyes with flowing water for at least 15 minutes

Skin Contact: Wash skin with deluge of water for at least 15 minutes

Ingestion: Induce vomiting as directed by medical personnel

Inhalation: If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get medical attention.

Section 5. Physical Data

Physical State Liquid	Appearance Blue, slightly viscous liquid	Odor Threshold (ppm) N/A	Solubility Soluble in water	Auto-ignition Temp N/A
Vapor Pressure <1 mm Hg 25C	Vapor Density (air=1): 2.62	Evaporation Rate N/A	Boiling Point over 200°F	Flash Point CC over 200°F
pH 8.5-10	Specific Gravity 1.02-1.14	Coeff. Water/oil Dist. N/A	Melting Point N/A	Flammable Limits UEL- N/A LEL:- N/A
Volatility/Vol (%) 60-70%	Flame Propagation Rate N/A	Flammability Classification N/A		

Section 6. Means to Extinguish

Flammability
N/A

Conditions
N/A

Fl. Pt - Auto Ignition - Flammable Limits
Fl. Pt—2.6/12.5% by volume

Explosivity
Not explosive under normal conditions of use. Vapors are heavier than air and may settle in low areas. Vapors may travel long distances to an ignition source and flash back explosively. Flame may be invisible. Not sensitive to impact. Probably will not accumulate static charge due to high electrical conductivity, however proper grounding during transfer is recommended.

Hazardous Combustion Products
N/A

Means to Extinguish
Small fire, use dry chemical powder. Large fire, use alcohol foam or fog

Section 7. Reactivity

Stability
Stable

Conditions to avoid
Temperature extremes

Hazardous Decomposition Products
Oxides of carbon (mono, di)

Conditions of Reactivity
N/A

Hazardous Polymerization
Will not occur

Incompatibility
Oxidizers

Section 8. Toxicological Properties

Routes of Entry Absorbed through the skin, eyes, inhalation and ingestion

Target Organs N/A

Effects of Acute Exposure

Eye	May cause redness or irritation
Skin	Prolonged use may cause irritation or defatting
Absorption	May be absorbed through the skin, eyes
Inhalation	Slightly hazardous if inhaled
Ingestion	May cause blindness, nausea, damage to GI tract

Effects of Chronic Exposure Breathing of vapors may cause nasal and respiratory irritation, nausea, headaches, dizziness, pulmonary edema and pneumonitis. May cause damage to central nervous system. Prolonged use may cause skin irritation or defatting.

Carcinogenic Effects
N/A

Reproductive Toxicity
N/A

Teratogenic and Mutagenic Effects
N/A

Exposure Limits	OSHA PEL TWA	ACGIH TLV TWA	STEL	TWAEV (Ont.)	STEV (Ont.)	CEV (Ont.)
Ammonium Hydroxide	N/A	N/A	N/A	N/A	N/A	N/A
Blue Pigment Dispersion	N/A	N/A	N/A	N/A	N/A	N/A
Isopropyl Alcohol	N/A	400ppm	N/A	N/A	N/A	N/A

Section 9. Regulatory Information

OSHA Hazardous
Non hazardous

Cal. Prop. 65
Not listed

Canadian WHMIS
N/A

RCRA Regulated
N/A

SARA 302/304
Not listed

SARA 313
Not listed

CERCLA 102A
Not listed

RQ
N/A

CWA 307
N/A

CWA 311
N/A

CAA 112 Release Prevention
N/A

CAA 112 Reg. Flam. Substance
N/A

CAA 112 Reg. Toxic Substance
N/A

TSCA Inventory
Listed

EEC Flammability
Not flammable

CEPA DSL
N/A

Proper US DOT Shipping Name
Not regulated

TDG Classification
Not listed

IATA Classification
Not listed

Limited Quantity
No

The information provided above is based upon unused product. Product characteristics may change after use, requiring further classification.



Section 1. Product and Preparation Information

Product Identifier
Tissue Marking Dye, Green

Product Use
Margin Identification

Date Prepared
Dec. 2009

Synonyms / Chemical Name
None

Reorder Number(s):
BG020, BG026

Manufacturer/ Preparer

Emergency Contact
Chemtec USA and Canada 800.424.9300

Section 2. Protective Measures



Personal Protection

Eyes: Goggles

Hands: Latex or nitrile gloves

Body: Laboratory coat

Respiratory Wear: approved/certified respirator
if airborne concentrations exceed exposure limits



Section 3. Hazardous Ingredients

Hazardous Ingredient	% wt.	CAS Number	LD50	LC50	TDG PIN
Ammonium Hydroxide	< 5	1336-21-6	N/A	N/A	N/A
Green Pigment Dispersion	< 15	1328-53-6	N/A	N/A	N/A
Isopropyl Alcohol	< 3	67-63-0	N/A	N/A	N/A

Section 4. First Aid Measures

Eye Contact: Flush eyes with flowing water for at least 15 minutes

Skin Contact: Wash skin with deluge of water for at least 15 minutes

Ingestion: Induce vomiting as directed by medical personnel

Inhalation: If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get medical attention.

Section 5. Physical Data

Physical State Liquid	Appearance Green, slightly viscous liquid	Odor Threshold (ppm) N/A	Solubility Soluble in water	Auto-ignition Temp N/A
Vapor Pressure <1 mm Hg 25C	Vapor Density (air=1): 2.62	Evaporation Rate N/A	Boiling Point over 200°F	Flash Point CC over 200°F
pH 8.5-10	Specific Gravity 1.21	Coeff. Water/oil Dist. N/A	Melting Point N/A	Flammable Limits UEL- N/A LEL:- N/A
Volatility/Vol (%) 60-70%	Flame Propagation Rate N/A	Flammability Classification N/A		

Section 6. Means to Extinguish

Flammability N/A	Conditions N/A	Fl. Pt - Auto Ignition - Flammable Limits Fl. Pt—2.6/12.5% by volume	Explosivity Not explosive under normal conditions of use. Vapors are heavier than air and may settle in low areas. Vapors may travel long distances to an ignition source and flash back explosively. Flame may be invisible. Not sensitive to impact. Probably will not accumulate static charge due to high electrical conductivity, however proper grounding during transfer is recommended.
Hazardous Combustion Products N/A		Means to Extinguish Small fire, use dry chemical powder. Large fire, use alcohol foam or fog	

Section 7. Reactivity

Stability Stable	Conditions to avoid Temperature extremes	Hazardous Decomposition Products Oxides of carbon (mono, di)
Conditions of Reactivity N/A	Hazardous Polymerization Will not occur	Incompatibility Oxidizers

Section 8. Toxicological Properties

Routes of Entry	Absorbed through the skin, eyes, inhalation and ingestion	Target Organs	N/A
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Effects of Acute Exposure

Eye	May cause redness or irritation
Skin	Prolonged use may cause irritation or defatting
Absorption	May be absorbed through the skin, eyes
Inhalation	Slightly hazardous if inhaled
Ingestion	May cause blindness, nausea, damage to GI tract

Effects of Chronic Exposure Breathing of vapors may cause nasal and respiratory irritation, nausea, headaches, dizziness, pulmonary edema and pneumonitis. May cause damage to central nervous system. Prolonged use may cause skin irritation or defatting.

Carcinogenic Effects
N/A

Reproductive Toxicity
N/A

Teratogenic and Mutagenic Effects
N/A

Exposure Limits	OSHA PEL TWA	ACGIH TLV TWA	STEL	TWAEV (Ont.)	STEV (Ont.)	CEV (Ont.)
Ammonium Hydroxide	N/A	N/A	N/A	N/A	N/A	N/A
Green Pigment Dispersion	N/A	N/A	N/A	N/A	N/A	N/A
Isopropyl Alcohol	N/A	400ppm	N/A	N/A	N/A	N/A

Section 9. Regulatory Information

OSHA Hazardous Non hazardous	Cal. Prop. 65 Not listed	Canadian WHMIS N/A	RCRA Regulated N/A
SARA 302/304 Not listed	SARA 313 Not listed	CERCLA 102A Not listed	RQ N/A
CWA 307 N/A	CWA 311 N/A	CAA 112 Release Prevention N/A	CAA 112 Reg. Flam. Substance N/A
CAA 112 Reg. Toxic Substance N/A	TSCA Inventory Listed	EEC Flammability Not flammable	CEPA DSL N/A
Proper US DOT Shipping Name Not regulated	TDG Classification Not listed	IATA Classification Not listed	Limited Quantity No

The information provided above is based upon unused product. Product characteristics may change after use, requiring further classification.



Section 1. Product and Preparation Information

Product Identifier
Tissue Marking Dye, Orange

Product Use
Margin Identification

Date Prepared
Dec. 2009

Synonyms / Chemical Name
None

Reorder Number(s):
BG020, BG025

Manufacturer/ Preparer

Emergency Contact
Chemtec USA and Canada 800.424.9300

Section 2. Protective Measures



Personal Protection

Eyes: Goggles

Hands: Latex or nitrile gloves

Body: Laboratory coat

Respiratory Wear: approved/certified respirator
if airborne concentrations exceed exposure limits



Section 3. Hazardous Ingredients

Hazardous Ingredient	% wt.	CAS Number	LD50	LC50	TDG PIN
Ammonium Hydroxide	< 5	1336-21-6	N/A	N/A	N/A
Orange Pigment Dispersion	< 15	15793-73-4	N/A	N/A	N/A
Isopropyl Alcohol	< 3	67-63-0	N/A	N/A	N/A

Section 4. First Aid Measures

Eye Contact: Flush eyes with flowing water for at least 15 minutes

Skin Contact: Wash skin with deluge of water for at least 15 minutes

Ingestion: Induce vomiting as directed by medical personnel

Inhalation: If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get medical attention.

Section 5. Physical Data

Physical State Liquid	Appearance Orange, slightly viscous liquid	Odor Threshold (ppm) N/A	Solubility Soluble in water	Auto-ignition Temp N/A
Vapor Pressure <1 mm Hg 25C	Vapor Density (air=1): 2.62	Evaporation Rate N/A	Boiling Point over 200°F	Flash Point CC over 200°F
pH 8.5-10	Specific Gravity 1.3	Coeff. Water/oil Dist. N/A	Melting Point N/A	Flammable Limits UEL- N/A LEL- N/A
Volatility/Vol (%) 60-70%	Flame Propagation Rate N/A	Flammability Classification N/A		

Section 6. Means to Extinguish

Flammability N/A	Conditions N/A	Fl. Pt - Auto Ignition - Flammable Limits Fl. Pt—2.6/12.5% by volume	Explosivity Not explosive under normal conditions of use. Vapors are heavier than air and may settle in low areas. Vapors may travel long distances to an ignition source and flash back explosively. Flame may be invisible. Not sensitive to impact. Probably will not accumulate static charge due to high electrical conductivity, however proper grounding during transfer is recommended.
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Hazardous Combustion Products N/A	Means to Extinguish Small fire, use dry chemical powder. Large fire, use alcohol foam or fog
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Section 7. Reactivity

Stability Stable	Conditions to avoid Temperature extremes	Hazardous Decomposition Products Oxides of carbon (mono, di)
Conditions of Reactivity N/A	Hazardous Polymerization Will not occur	Incompatibility Oxidizers

Section 8. Toxicological Properties

Routes of Entry	Absorbed through the skin, eyes, inhalation and ingestion	Target Organs	N/A
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Effects of Acute Exposure

Eye	May cause redness or irritation
Skin	Prolonged use may cause irritation or defatting
Absorption	May be absorbed through the skin, eyes
Inhalation	Slightly hazardous if inhaled
Ingestion	May cause blindness, nausea, damage to GI tract

Effects of Chronic Exposure Breathing of vapors may cause nasal and respiratory irritation, nausea, headaches, dizziness, pulmonary edema and pneumonitis. May cause damage to central nervous system. Prolonged use may cause skin irritation or defatting.

Carcinogenic Effects
N/A

Reproductive Toxicity
N/A

Teratogenic and Mutagenic Effects
N/A

Exposure Limits	OSHA PEL TWA	ACGIH TLV TWA	STEL	TWAEV (Ont.)	STEV (Ont.)	CEV (Ont.)
Ammonium Hydroxide	N/A	N/A	N/A	N/A	N/A	N/A
Orange Pigment Dispersion	N/A	N/A	N/A	N/A	N/A	N/A
Isopropyl Alcohol	N/A	400ppm	N/A	N/A	N/A	N/A

Section 9. Regulatory Information

OSHA Hazardous Non hazardous	Cal. Prop. 65 Not listed	Canadian WHMIS N/A	RCRA Regulated N/A
SARA 302/304 Not listed	SARA 313 Not listed	CERCLA 102A Not listed	RQ N/A
CWA 307 N/A	CWA 311 N/A	CAA 112 Release Prevention N/A	CAA 112 Reg. Flam. Substance N/A
CAA 112 Reg. Toxic Substance N/A	TSCA Inventory Listed	EEC Flammability Not flammable	CEPA DSL N/A
Proper US DOT Shipping Name Not regulated	TDG Classification Not listed	IATA Classification Not listed	Limited Quantity No

The information provided above is based upon unused product. Product characteristics may change after use, requiring further classification.



Section 1. Product and Preparation Information

Product Identifier
Tissue Marking Dye, Red

Product Use
Margin Identification

Date Prepared
Dec. 2009

Synonyms / Chemical Name
None

Reorder Number(s):
BG020, BG024

Manufacturer/ Preparer

Emergency Contact
Chemtec USA and Canada 800.424.9300

Section 2. Protective Measures



Personal Protection

Eyes: Goggles

Hands: Latex or nitrile gloves

Body: Laboratory coat

Respiratory Wear: approved/certified respirator
if airborne concentrations exceed exposure limits



Section 3. Hazardous Ingredients

Hazardous Ingredient	% wt.	CAS Number	LD50	LC50	TDG PIN
Ammonium Hydroxide	< 5	1336-21-6	N/A	N/A	N/A
Red Pigment Dispersion	< 15	1047-16-1	N/A	N/A	N/A
Isopropyl Alcohol	< 3	67-63-0	N/A	N/A	N/A

Section 4. First Aid Measures

Eye Contact: Flush eyes with flowing water for at least 15 minutes

Skin Contact: Wash skin with deluge of water for at least 15 minutes

Ingestion: Induce vomiting as directed by medical personnel

Inhalation: If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get medical attention.

Section 5. Physical Data

Physical State Liquid	Appearance Red, slightly viscous liquid	Odor Threshold (ppm) N/A	Solubility Soluble in water	Auto-ignition Temp N/A
Vapor Pressure <1 mm Hg 25C	Vapor Density (air=1): 2.62	Evaporation Rate N/A	Boiling Point over 200°F	Flash Point CC over 200°F
pH 8.5-10	Specific Gravity 1.02-1.14	Coeff. Water/oil Dist. N/A	Melting Point N/A	Flammable Limits UEL- N/A LEL- N/A
Volatility/Vol (%) 60-70%	Flame Propagation Rate N/A	Flammability Classification N/A		

Section 6. Means to Extinguish

Flammability N/A	Conditions N/A	Fl. Pt - Auto Ignition - Flammable Limits Fl. Pt—2.6/12.5% by volume	Explosivity Not explosive under normal conditions of use. Vapors are heavier than air and may settle in low areas. Vapors may travel long distances to an ignition source and flash back explosively. Flame may be invisible. Not sensitive to impact. Probably will not accumulate static charge due to high electrical conductivity; however proper grounding during transfer is recommended.
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Hazardous Combustion Products N/A	Means to Extinguish Small fire, use dry chemical powder. Large fire, use alcohol foam or fog
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Section 7. Reactivity

Stability Stable	Conditions to avoid Temperature extremes	Hazardous Decomposition Products Oxides of carbon (mono, di)
Conditions of Reactivity N/A	Hazardous Polymerization Will not occur	Incompatibility Oxidizers

Section 8. Toxicological Properties

Routes of Entry	Absorbed through the skin, eyes, inhalation and ingestion	Target Organs	N/A
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Effects of Acute Exposure

Eye	May cause redness or irritation
Skin	Prolonged use may cause irritation or defatting
Absorption	May be absorbed through the skin, eyes
Inhalation	Slightly hazardous if inhaled
Ingestion	May cause blindness, nausea, damage to GI tract

Effects of Chronic Exposure Breathing of vapors may cause nasal and respiratory irritation, nausea, headaches, dizziness, pulmonary edema and pneumonitis. May cause damage to central nervous system. Prolonged use may cause skin irritation or defatting.

Carcinogenic Effects
N/A

Reproductive Toxicity
N/A

Teratogenic and Mutagenic Effects
N/A

Exposure Limits	OSHA PEL TWA	ACGIH TLV TWA	STEL	TWAEV (Ont.)	STEV (Ont.)	CEV (Ont.)
Ammonium Hydroxide	N/A	N/A	N/A	N/A	N/A	N/A
Red Pigment Dispersion	N/A	N/A	N/A	N/A	N/A	N/A
Isopropyl Alcohol	N/A	400ppm	N/A	N/A	N/A	N/A

Section 9. Regulatory Information

OSHA Hazardous Non hazardous	Cal. Prop. 65 Not listed	Canadian WHMIS N/A	RCRA Regulated N/A
SARA 302/304 Not listed	SARA 313 Not listed	CERCLA 102A Not listed	RQ N/A
CWA 307 N/A	CWA 311 N/A	CAA 112 Release Prevention N/A	CAA 112 Reg. Flam. Substance N/A
CAA 112 Reg. Toxic Substance N/A	TSCA Inventory Listed	EEC Flammability Not flammable	CEPA DSL N/A
Proper US DOT Shipping Name Not regulated	TDG Classification Not listed	IATA Classification Not listed	Limited Quantity No

The information provided above is based upon unused product. Product characteristics may change after use, requiring further classification.



Material Safety Data Sheet Histology / Cytology Reagents

Tissue Marking Dyes

Section 1. Product and Preparation Information

Product Identifier
Tissue Marking Dye, Purple

Product Use
Margin Identification

Date Prepared
Dec. 2009

Synonyms / Chemical Name
None

Reorder Number(s):
BG020,BG027

Manufacturer/ Preparer

Emergency Contact
Chemtec USA and Canada 800.424.9300

Section 2. Protective Measures



Personal Protection

Eyes: Goggles

Hands: Latex or nitrile gloves

Body: Laboratory coat

Respiratory Wear: approved/certified respirator
if airborne concentrations exceed exposure limits



Section 3. Hazardous Ingredients

Hazardous Ingredient	% wt.	CAS Number	LD50	LC50	TDG PIN
Ammonium Hydroxide	< 5	1336-21-6	N/A	N/A	N/A
Violet Pigment Dispersion	< 15	1325-82-2	N/A	N/A	N/A
Isopropyl Alcohol	< 3	67-63-0	N/A	N/A	N/A

Section 4. First Aid Measures

Eye Contact: Flush eyes with flowing water for at least 15 minutes

Skin Contact: Wash skin with deluge of water for at least 15 minutes

Ingestion: Induce vomiting as directed by medical personnel

Inhalation: If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get medical attention.

Section 5. Physical Data

Physical State Liquid	Appearance Violet, slightly viscous liquid	Odor Threshold (ppm) N/A	Solubility Soluble in water	Auto-ignition Temp N/A
Vapor Pressure <1 mm Hg 25C	Vapor Density (air=1): 2.62	Evaporation Rate N/A	Boiling Point over 200°F	Flash Point CC over 200°F
pH 8.5-10	Specific Gravity 1.02-1.14	Coeff. Water/oil Dist. N/A	Melting Point N/A	Flammable Limits UEL: N/A LEL: N/A
Volatility/Vol (%) 60-70%	Flame Propagation Rate N/A	Flammability Classification N/A		

Section 6. Means to Extinguish

Flammability N/A	Conditions N/A	Fl. Pt - Auto Ignition - Flammable Limits Fl. Pt—2.6/12.5% by volume	Explosivity Not explosive under normal conditions of use. Vapors are heavier than air and may settle in low areas. Vapors may travel long distances to an ignition source and flash back explosively. Flame may be invisible. Not sensitive to impact. Probably will not accumulate static charge due to high electrical conductivity, however proper grounding during transfer is recommended.
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Hazardous Combustion Products N/A	Means to Extinguish Small fire, use dry chemical powder. Large fire, use alcohol foam or fog
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Section 7. Reactivity

Stability Stable	Conditions to avoid Temperature extremes	Hazardous Decomposition Products Oxides of carbon (mono, di)
Conditions of Reactivity N/A	Hazardous Polymerization Will not occur	Incompatibility Oxidizers

Section 8. Toxicological Properties

Routes of Entry Absorbed through the skin, eyes, inhalation and ingestion	Target Organs N/A
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Effects of Acute Exposure

Eye	May cause redness or irritation
Skin	Prolonged use may cause irritation or defatting
Absorption	May be absorbed through the skin, eyes
Inhalation	Slightly hazardous if inhaled
Ingestion	May cause blindness, nausea, damage to GI tract

Effects of Chronic Exposure Breathing of vapors may cause nasal and respiratory irritation, nausea, headaches, dizziness, pulmonary edema and pneumonitis. May cause damage to central nervous system. Prolonged use may cause skin irritation or defatting.

Carcinogenic Effects
N/A

Reproductive Toxicity
N/A

Teratogenic and Mutagenic Effects
N/A

Exposure Limits	OSHA PEL TWA	ACGIH TLV TWA	STEL	TWAEV (Ont.)	STEV (Ont.)	CEV (Ont.)
Ammonium Hydroxide	N/A	N/A	N/A	N/A	N/A	N/A
Violet Pigment Dispersion	10mg/MB	10mg/MB	N/A	N/A	N/A	N/A
Isopropyl Alcohol	N/A	400ppm	N/A	N/A	N/A	N/A

Section 9. Regulatory Information

OSHA Hazardous Non hazardous	Cal. Prop. 65 Not listed	Canadian WHMIS N/A	RCRA Regulated N/A
SARA 302/304 Not listed	SARA 313 Not listed	CERCLA 102A Not listed	RQ N/A
CWA 307 N/A	CWA 311 N/A	CAA 112 Release Prevention N/A	CAA 112 Reg. Flam. Substance N/A
CAA 112 Reg. Toxic Substance N/A	TSCA Inventory Listed	EEC Flammability Not flammable	CEPA DSL N/A
Proper US DOT Shipping Name Not regulated	TDG Classification Not listed	IATA Classification Not listed	Limited Quantity No

The information provided above is based upon unused product. Product characteristics may change after use, requiring further classification.



Section 1. Product and Preparation Information

Product Identifier
Tissue Marking Dye, Yellow

Product Use
Margin Identification

Date Prepared
Dec. 2009

Synonyms / Chemical Name
None

Reorder Number(s):
BG020, BG023

Manufacturer/ Preparer

Emergency Contact
Chentrec USA and Canada 800.424.9300

Section 2. Protective Measures



Personal Protection

Eyes: Goggles

Hands: Latex or nitrile gloves

Body: Laboratory coat

Respiratory Wear: approved/certified respirator
if airborne concentrations exceed exposure limits



Section 3. Hazardous Ingredients

Hazardous Ingredient	% wt.	CAS Number	LD50	LC50	TDG PIN
Ammonium Hydroxide	< 5	1336-21-6	N/A	N/A	N/A
Yellow Pigment Dispersion	< 15	6358-31-2	N/A	N/A	N/A
Isopropyl Alcohol	< 3	67-63-0	N/A	N/A	N/A

Section 4. First Aid Measures

Eye Contact: Flush eyes with flowing water for at least 15 minutes

Skin Contact: Wash skin with deluge of water for at least 15 minutes

Ingestion: Induce vomiting as directed by medical personnel

Inhalation: If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get medical attention.

Section 5. Physical Data

Physical State Liquid	Appearance Yellow, slightly viscous liquid	Odor Thresh hold (ppm) N/A	Solubility Soluble in water	Auto-ignition Temp N/A
Vapor Pressure <1 mm Hg 25C	Vapor Density (air=1): 2.62	Evaporation Rate N/A	Boiling Point over 200°F	Flash Point CC over 200°F
pH 8.5-10	Specific Gravity 1.02-1.14	Coeff. Water/oil Dist. N/A	Melting Point N/A	Flammable Limits UEL: N/A LEL: N/A
Volatility/Vol (%) 60-70%	Flame Propagation Rate N/A	Flammability Classification N/A		

Section 6. Means to Extinguish

Flammability N/A	Conditions N/A	Fl. Pt - Auto Ignition - Flammable Limits Fl. Pt—2.6/12.5% by volume	Explosivity Not explosive under normal conditions of use. Vapors are heavier than air and may settle in low areas. Vapors may travel long distances to an ignition source and flash back explosively. Flame may be invisible. Not sensitive to impact. Probably will not accumulate static charge due to high electrical conductivity, however proper grounding during transfer is recommended.
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Hazardous Combustion Products N/A	Means to Extinguish Small fire, use dry chemical powder. Large fire, use alcohol foam or fog
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Section 7. Reactivity

Stability Stable	Conditions to avoid Temperature extremes	Hazardous Decomposition Products Oxides of carbon (mono, di)
Conditions of Reactivity N/A	Hazardous Polymerization Will not occur	Incompatibility Oxidizers

Section 8. Toxicological Properties

Routes of Entry Absorbed through the skin, eyes, inhalation and ingestion	Target Organs N/A
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Effects of Acute Exposure

Eye	May cause redness or irritation
Skin	Prolonged use may cause irritation or defatting
Absorption	May be absorbed through the skin, eyes
Inhalation	Slightly hazardous if inhaled
Ingestion	May cause blindness, nausea, damage to GI tract

Effects of Chronic Exposure Breathing of vapors may cause nasal and respiratory irritation, nausea, headaches, dizziness, pulmonary edema and pneumonitis. May cause damage to central nervous system. Prolonged use may cause skin irritation or defatting.

Carcinogenic Effects
N/A

Reproductive Toxicity
N/A

Teratogenic and Mutagenic Effects
N/A

Exposure Limits	OSHA PEL TWA	ACGIH TLV TWA	STEL	TWAEV (Ont.)	STEV (Ont.)	CEV (Ont.)
Ammonium Hydroxide	N/A	N/A	N/A	N/A	N/A	N/A
Yellow Pigment Dispersion	N/A	N/A	N/A	N/A	N/A	N/A
Isopropyl Alcohol	N/A	400ppm	N/A	N/A	N/A	N/A

Section 9. Regulatory Information

OSHA Hazardous Non hazardous	Cal. Prop. 65 Not listed	Canadian WHMIS N/A	RCRA Regulated N/A
SARA 302/304 Not listed	SARA 313 Not listed	CERCLA 102A Not listed	RQ N/A
CWA 307 N/A	CWA 311 N/A	CAA 112 Release Prevention N/A	CAA 112 Reg. Flam. Substance N/A
CAA 112 Reg. Toxic Substance N/A	TSCA Inventory Listed	EEC Flammability Not flammable	CEPA DSL N/A
Proper US DOT Shipping Name Not regulated	TDG Classification Not listed	IATA Classification Not listed	Limited Quantity No

The information provided above is based upon unused product. Product characteristics may change after use, requiring further classification.