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SAFETY DATA SHEET

1. Identification

Product identifier

Product No.:	Product name:	Common name(s), synonym(s)
212527	BOTTLE GRAM DECOLORIZER 250ML	No data available

Other means of identification

SDS number: 088100175759

Recommended use and restriction on use

Recommended use: Laboratory Chemicals
Restrictions on use: None known.

Manufacturer/Importer/Supplier/Distributor Information

Manufacturer

Company Name:	BD Diagnostic Systems
Address:	7 Loveton Circle 21152 Sparks, MD USA
Telephone:	1 410 771 0100 or 1 800 638 8663
Fax:	
Contact Person:	Tech Services

Emergency telephone number: CHEMTREC 1 800 424 9300

2. Hazard(s) identification

Hazard Classification

Physical Hazards

Flammable liquids	Category 2
Static-accumulating flammable liquid	Category 1

Health Hazards

Serious Eye Damage/Eye Irritation	Category 2A
Specific Target Organ Toxicity - Single Exposure	Category 3

Label Elements

Hazard Symbol:

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Signal Word:	Danger
Hazard Statement:	H225: Highly flammable liquid and vapor. 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. H319: Causes serious eye irritation. H336: May cause drowsiness or dizziness.
Target Organs:	Narcotic effect.
Precautionary Statements	
Prevention:	P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P240: Ground and bond container and receiving equipment. P241: Use explosion-proof [electrical/ventilating/lighting/…] equipment. P242: Use non-sparking tools. P243: Take action to prevent static discharges. P261: Avoid breathing dust/fume/gas/mist/vapors/spray. P264: Wash thoroughly after handling. P271: Use only outdoors or in a well-ventilated area. P280: Wear protective gloves/eye protection/face protection. -: These alone may be insufficient to remove static electricity.
Response:	P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing. P312: Call a POISON CENTER/doctor if you feel unwell. P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313: If eye irritation persists: Get medical advice/attention. P370+P378: In case of fire: Use water spray, fog, CO2, dry chemical, or alcohol resistant foam.
Storage:	P403: Store in a well-ventilated place. P235: Keep cool. P233: Keep container tightly closed. P405: Store locked up.

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Disposal: P501: 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.

Other hazards which do not result in GHS classification None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
2-Propanol	No data available.	67-63-0	60 - 80%
2-Propanone	No data available.	67-64-1	10 - 30%

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

4. First-aid measures

General information: Get immediate medical advice/attention. Causes serious eye irritation. May cause drowsiness or dizziness.

Ingestion: If swallowed, rinse mouth with water (only if the person is conscious). Call a physician or poison control center immediately.

Inhalation: Get medical attention immediately. Provide fresh air, warmth and rest, preferably in comfortable upright sitting position.

Skin Contact: Flush contaminated area with plenty of water. Get medical attention immediately.

Eye contact: If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

Most important symptoms/effects, acute and delayed

Symptoms: Symptoms may be delayed.

Hazards: Causes serious eye irritation. May cause drowsiness or dizziness.

Indication of immediate medical attention and special treatment needed

Treatment: Get immediate medical advice/attention.

5. Fire-fighting measures

General Fire Hazards: Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Use water to keep fire exposed containers cool and disperse vapors.

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Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:	Water spray, fog, CO2, dry chemical, or alcohol resistant foam.
Unsuitable extinguishing media:	Avoid water in straight hose stream; will scatter and spread fire.
Specific hazards arising from the chemical:	Vapors are flammable and heavier than air. Vapors may travel across the ground and reach remote ignition sources causing a flashback fire danger. Exposure to fire can generate toxic fumes. Fire or excessive heat may produce hazardous decomposition products.

Special protective equipment and precautions for firefighters

Special fire fighting procedures:	Flammable. May form explosive or toxic mixtures with air.
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:	Ensure suitable personal protection (including respiratory protection) during removal of spillages in a confined area. Contact local authorities in case of spillage to drain/aquatic environment.
Methods and material for containment and cleaning up:	Stop leak if possible without any risk. Prevent entry into waterways, sewer, basements or confined areas. Sweep up and place in a clearly labeled container for chemical waste. See Section 8 of the SDS for Personal Protective Equipment. For waste disposal, see section 13 of the SDS.
Environmental Precautions:	Do not release into the environment. Environmental manager must be informed of all major spillages.

7. Handling and storage

Precautions for safe handling:	Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, on clothing. Do not eat, drink or smoke when using the product. Read and follow manufacturer's recommendations. Wash promptly with soap and water if skin becomes contaminated. Use personal protective equipment as required.
Conditions for safe storage, including any incompatibilities:	Store in tightly closed original container in a dry, cool and well-ventilated place.

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8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
2-Propanol	TWA	200 ppm 492 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (07 2009)
	STEL	400 ppm 984 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (07 2009)
2-Propanol	STEL	400 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWA	200 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
2-Propanol	STEL	400 ppm	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2011)
	TWA	200 ppm	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2011)
2-Propanol	STEL	400 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
	TWA	200 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
2-Propanol	15 MIN ACL	400 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009)
	8 HR ACL	200 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009)
2-Propanol	STEL	500 ppm 1,230 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)
	TWA	400 ppm 983 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)

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2-Propanol	TWA	200 ppm	US. ACGIH Threshold Limit Values, as amended (12 2010)
	STEL	400 ppm	US. ACGIH Threshold Limit Values, as amended (12 2010)
2-Propanone	TWA	500 ppm 1,200 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (07 2009)
	STEL	750 ppm 1,800 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (07 2009)
2-Propanone	TWA	250 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	STEL	500 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
2-Propanone	STEL	500 ppm	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2015)
	TWA	250 ppm	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2015)
2-Propanone	15 MIN ACL	750 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009)
	8 HR ACL	500 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009)
2-Propanone	STEL	1,000 ppm 2,380 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)
	TWA	500 ppm 1,190 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)
2-Propanone	TWA	250 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (08 2017)
	STEL	500 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (08 2017)

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2-Propanone	TWA	250 ppm	US. ACGIH Threshold Limit Values, as amended (03 2015)
	STEL	500 ppm	US. ACGIH Threshold Limit Values, as amended (03 2015)

Appropriate Engineering Controls Adequate ventilation should be provided so that exposure limits are not exceeded.

Individual protection measures, such as personal protective equipment

General information: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

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

Skin Protection

Hand Protection: Use suitable protective gloves if risk of skin contact.

Skin protection: Wear appropriate clothing to prevent reasonably probable skin contact.

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: Do not eat, drink or smoke when using the product. Do not get this material in contact with skin. Wash promptly if skin becomes contaminated. Wash at the end of each work shift and before eating, smoking and using the toilet. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapors/spray.

9. Physical and chemical properties

Appearance

Physical state: liquid
Form: liquid
Color: According to product specification.
Odor: Characteristic
Odor threshold: No data available.
pH: No data available.
Melting point/freezing point: No data available.
Initial boiling point and boiling range: 56.1 - 82.0 °C
Flash Point: -6.7 °C
Evaporation rate: No data available.
Flammability (solid, gas): No data available.
Upper/lower limit on flammability or explosive limits

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Flammability limit - upper (%):	18.0 %(V)
Flammability limit - lower (%):	3.5 %(V)
Explosive limit - upper:	No data available.
Explosive limit - lower:	No data available.
Vapor pressure:	186.0 hPa
Vapor density:	No data available.
Relative density:	No data available.
Solubility(ies)	
Solubility in water:	Completely Soluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	Not determined.

Other information

Minimum ignition temperature:	425.0 °C

10. Stability and reactivity

Reactivity:	Stable under normal temperature conditions and recommended use.
Chemical Stability:	No data available.
Possibility of hazardous reactions:	Do not subject to grinding/shock/friction/. Contact with acids and metals can lead to violent decomposition.
Conditions to avoid:	Heat, sparks, flames. Shocks and physical damage. Avoid conditions which create dust.
Incompatible Materials:	Strong acids. Strong oxidizing agents. Peroxides. Other metals or alloys.
Hazardous Decomposition Products:	By fire, toxic gases may be formed (COx, NOx).

11. Toxicological information

General information: This material is toxic.

Information on likely routes of exposure

Ingestion:	May irritate and cause malaise.
Inhalation:	Toxic by inhalation.
Skin Contact:	Toxic in contact with skin.

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Eye contact: May irritate eyes.

Symptoms related to the physical, chemical and toxicological characteristics

Ingestion: No data available.

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral
Product: ATEmix: 12,000 mg/kg

Dermal
Product: No data available.

Inhalation
Product: No data available.

Repeated dose toxicity
Product: No data available.

Specified substance(s):

2-Propanol	NOAEL (Rat, Inhalation, >= 104 Weeks): 5,000 ppm(m) Inhalation Experimental result, Key study
2-Propanone	NOAEL (Mouse(Male), Oral, 13 Weeks): 20,000 ppm(m) Oral Experimental result, Key study NOAEL (Mouse(female), Oral, 13 Weeks): 20,000 ppm(m) Oral Experimental result, Key study LOAEL (Rat(Female, Male), Oral, 30 - 90 d): 500 mg/kg Oral Not specified, Not specified LOAEL (Rat(Male), Oral, 13 Weeks): 20,000 ppm(m) Oral Experimental result, Key study LOAEL (Mouse(Male), Oral, 14 d): 20,000 ppm(m) Oral Experimental result, Supporting study

Skin Corrosion/Irritation
Product: No data available.

Specified substance(s):

2-Propanol	in vivo (Rabbit): Not Classified Experimental result, Key study

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2-Propanone	in vivo (Guinea pig): Not irritant Experimental result, Weight of Evidence study in vivo (Guinea pig): Not irritant Experimental result, Weight of Evidence study in vivo (Rabbit): Not irritant Experimental result, Supporting study

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

2-Propanol	in vivo (Rabbit, 1 d): Category 2: Causes serious eye irritation CLP (1272/2008)
2-Propanone	Irritating Exposure for 15 minutes to 1660 ppm causes irritation of eyes

Respiratory or Skin Sensitization

Product: No data available.

Specified substance(s):

2-Propanol	Skin sensitization:, in vivo (Guinea pig): Non sensitising
2-Propanone	Skin sensitization:, in vivo (Guinea pig): Non sensitising Skin sensitization:, in vivo (Mouse): Non sensitising

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

ACGIH Carcinogens:

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: No data available.

In vivo

Product: No data available.

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure

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Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure
Product: No data available.

Aspiration Hazard
Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish
Product: No negative effects on the aquatic environment are known.

Aquatic Invertebrates
Product: No negative effects on the aquatic environment are known.

Chronic hazards to the aquatic environment:

Fish
Product: No negative effects on the aquatic environment are known.

Aquatic Invertebrates
Product: No negative effects on the aquatic environment are known.

Toxicity to Aquatic Plants
Product: No data available.

Persistence and Degradability

Biodegradation
Product: No data available.

Specified substance(s):

2-Propanol	53 % (5 d) Detected in water. Experimental result, Key study
2-Propanone	56 % Detected in water. Experimental result, Supporting study 90.9 % (28 d) Detected in water. Experimental result, Key study 76 % Detected in water. Experimental result, Supporting study 38 % Detected in water. Experimental result, Supporting study 74.3 - 95.4 % (26 d) Detected in water. Experimental result, Supporting study

BOD/COD Ratio

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Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Specified substance(s):

2-Propanone — Bioconcentration Factor (BCF): 3 Aquatic sediment Estimated by calculation, Supporting study
Haddock, adult, Bioconcentration Factor (BCF): 0.69 Aquatic sediment Experimental result, Not specified

Partition Coefficient n-octanol / water (log Kow)

Product: Log Kow: No data available.

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

2-Propanol — No data available.
2-Propanone — No data available.

Other adverse effects: No data available.

13. Disposal considerations

General information: This material and its container must be disposed of as hazardous waste.

Disposal instructions: Dispose of waste at a facility with special permission to dispose industrial wastes subject to special control. Waste should be accompanied by a manifest for the industrial wastes.

Contaminated Packaging: No data available.

14. Transport information

DOT

Special precautions for user: Not regulated.

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IMDG

UN Number:	UN 3316
UN Proper Shipping Name:	CHEMICAL KIT
Transport Hazard Class(es)	
Class:	9
Subsidiary risk:	9
EmS No.:	F-A, S-P
Packing Group:	II
Environmental Hazards	
Marine Pollutant:	Not regulated.
Special precautions for user:	Not regulated.

TDG

UN Number	UN3316
Proper Shipping Name	CHEMICAL KIT
Class	9
Packing Group	II
Label(s)	9
Subsidiary risk label	
Special precautions for user:	Not regulated.

IATA

UN Number:	UN 3316
Proper Shipping Name:	Chemical kit
Transport Hazard Class(es):	
Class:	9
Subsidiary risk:	9MI
Packing Group:	II
Environmental Hazards	
Marine pollutant:	Not regulated.
Special precautions for user:	Not regulated.

15. Regulatory information

Canada Federal Regulations
List of Toxic Substances (CEPA, Schedule 1)
Not Regulated

Export Control List (CEPA 1999, Schedule 3)
Not Regulated

National Pollutant Release Inventory (NPRI)
Canada. National Pollutant Release Inventory (NPRI) Substances, Part 5, VOCs with Additional Reporting Requirements
NPRI PT5 2-Propanol

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Canada. National Pollutant Release Inventory (NPRI) (Schedule 1, Parts 1-4)

NPRI	2-Propanol 2-Propanone

Greenhouse Gases

Not Regulated

Controlled Drugs and Substances Act

CA CDSI	Not Regulated
CA CDSII	Not Regulated
CA CDSIII	Not Regulated
CA CDSIV	Not Regulated
CA CDSV	Not Regulated
CA CDSVII	Not Regulated
CA CDSVIII	Not Regulated

Precursor Control Regulations

Chemical Identity
2-Propanone

International regulations

Montreal protocol

Not applicable

Stockholm convention

Not applicable

Rotterdam convention

Not applicable

Kyoto protocol

Not applicable

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

Issue Date:	06/19/2020
Version #:	1.1

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Revision Information:

Further Information: No data available.

Disclaimer:

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