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SAFETY DATA SHEET

1. Identification

Product identifier

Product No.:	Product name:	Common name(s), synonym(s)
960120	BD™ Purprep™ 26mL Applicator	No data available
960110	BD™ Purprep™ 10.5mL Applicator	No data available

Other means of identification

SDS number: 088100347671

Recommended use and restriction on use

Recommended use: Skin Antiseptic
Restrictions on use: For External Use Only

Manufacturer/Importer/Supplier/Distributor Information

Manufacturer

Company Name: Carefusion 213, LLC., Subsidiary of Becton, Dickinson and Co.
Address: 1550 Northwestern Dr
El Paso, TX 79912 USA
Telephone: 800-523-0502 (Monday to Friday 8 a.m. to 5 p.m. CT)
Fax:
Contact Person: Customer Service

Emergency telephone number:

2. Hazard(s) identification

Hazard Classification

Physical Hazards

Flammable liquids — 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:	H224: Extremely flammable liquid and vapor. H319: Causes serious eye irritation. H336: May cause drowsiness or dizziness.
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. P280: Wear protective gloves/protective clothing/eye protection/face protection. P264: Wash thoroughly after handling. P261: Avoid breathing dust/fume/gas/mist/vapors/spray. P271: Use only outdoors or in a well-ventilated area.
Response:	P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing. 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. P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. P312: Call a POISON CENTER/doctor if you feel unwell. 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.
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:	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	72.5%
2-Pyrrolidinone, 1-ethenyl-, homopolymer, compd. with iodine	No data available.	25655-41-8	8.3%

* 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 medical attention if symptoms occur.

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.

Inhalation: Provide fresh air, warmth and rest, preferably in comfortable upright sitting position. If breathing stops, provide artificial respiration. Get medical attention immediately.

Skin Contact: If skin irritation or an allergic skin reaction develops, get medical attention. Flush contaminated area with plenty of water. Get medical attention immediately. Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water.

Eye contact: Important! Immediately rinse with water for 15-30 minutes. Get medical attention if irritation persists after washing.

Most important symptoms/effects, acute and delayed

Symptoms: Symptoms may be delayed.

Indication of immediate medical attention and special treatment needed

Treatment: Get medical attention if symptoms occur.

5. Fire-fighting measures

General Fire Hazards: Self-contained breathing apparatus and full protective clothing must be worn in case of fire. 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. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Wash thoroughly after dealing with a spillage. 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:	Read and follow manufacturer's recommendations. Use personal protective equipment as required. Avoid contact with eyes. Flammable/combustible - Keep away from oxidizers, heat and flames.
Conditions for safe storage, including any incompatibilities:	Keep away from sources of ignition - No smoking.

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8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
2-Propanol	TWA	400 ppm 980 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
	STEL	500 ppm 1,225 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
	TWA	400 ppm 980 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	STEL	500 ppm 1,225 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	AN ESL	200 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (12 2010)
	ST ESL	2,000 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (12 2010)
	AN ESL	492 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (12 2010)
	ST ESL	4,920 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (12 2010)
	TWA PEL	400 ppm 980 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (08 2010)
	STEL	500 ppm 1,225 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (08 2010)
	TWA	200 ppm	US. ACGIH Threshold Limit Values, as amended (12 2010)
	STEL	400 ppm	US. ACGIH Threshold Limit Values, as amended (12 2010)
	STEL	500 ppm 1,225 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2005)
	REL	400 ppm 980 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2005)
	PEL	400 ppm 980 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
	LEL	2.0 %	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended (10 2017)
	IDLH	2,000 ppm	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended (10 2017)

Biological Limit Values

Chemical Identity	Exposure Limit Values	Source
2-Propanol (acetone: Sampling time: End of shift at end of work week.)	40 mg/l (Urine)	ACGIH BEI (03 2013)

Appropriate Engineering Controls

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

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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: Use eye protection. Wear safety glasses with side shields (or goggles).

Skin Protection

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

Other: Wear a lab coat or similar protective clothing.

Respiratory Protection: No protection is ordinarily required under normal conditions of use and with adequate ventilation. 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. Avoid contact with eyes. Observe good industrial hygiene practices. 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:	No data available.
Color:	Dark brown
Odor:	alcohol-like
Odor threshold:	No data available.
pH:	No data available.
Melting point/freezing point:	No data available.
Initial boiling point and boiling range:	No data available.
Flash Point:	17.7 °C
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.

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Vapor pressure:	No data available.
Vapor density:	No data available.
Relative density:	No data available.
Solubility(ies)	
Solubility in water:	No data available.
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:	No data available.

10. Stability and reactivity

Reactivity:	Stable under normal temperature conditions and recommended use.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	None under normal conditions.
Conditions to avoid:	Heat, sparks, flames.
Incompatible Materials:	Strong oxidizers, strong acids Peroxides.
Hazardous Decomposition Products:	By heating and fire, harmful vapors/gases may be formed.

11. Toxicological information

Information on likely routes of exposure

Ingestion:	Expected to be a low ingestion hazard.
Inhalation:	None under normal conditions.
Skin Contact:	Prolonged contact may cause dryness of the skin.
Eye contact:	Avoid contact with eyes.

Symptoms related to the physical, chemical and toxicological characteristics

Ingestion:	No data available.
Inhalation:	No specific symptoms noted.
Skin Contact:	Repeated exposure may cause skin dryness or cracking.
Eye contact:	Causes serious eye irritation.

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Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral
Product: No data available.

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

Skin Corrosion/Irritation
Product: No data available.

Specified substance(s):
2-Propanol — in vivo (Rabbit): Not Classified Experimental result, Key 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)

Respiratory or Skin Sensitization
Product: No data available.

Specified substance(s):
2-Propanol — Skin sensitization:, in vivo (Guinea pig): 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

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US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:
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
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 data available.

Specified substance(s):

2-Propanol	LC 50 (Pimephales promelas, 96 h): 8,680 mg/l LC 50 (Western mosquitofish (Gambusia affinis), 24 h): > 1,400 mg/l Mortality LC 50 (Bluegill (Lepomis macrochirus), 96 h): > 1,400 mg/l Mortality LC 50 (Fathead minnow (Pimephales promelas), 48 h): 10,400 mg/l Mortality LC 50 (Harlequinfish, red rasbora (Rasbora heteromorpha), 96 h): 4,200 mg/l Mortality
2-Pyrrolidinone, 1-ethenyl-, homopolymer, compd. with iodine	LC 50 (Rainbow trout,donaldson trout (Oncorhynchus mykiss), 15 min): 1,562 - 1,722 mg/l Mortality LC 50 (Rainbow trout,donaldson trout (Oncorhynchus mykiss), 15 min): 1,431 - 1,531 mg/l Mortality

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	LC 50 (Rainbow trout,donaldson trout (Oncorhynchus mykiss), 15 min): 1,535 - 1,668 mg/l Mortality LC 50 (Rainbow trout,donaldson trout (Oncorhynchus mykiss), 1 h): 990 - 1,113 mg/l Mortality LC 50 (Rainbow trout,donaldson trout (Oncorhynchus mykiss), 15 min): > 2,000 mg/l Mortality

Aquatic Invertebrates

Product:	No data available.

Specified substance(s):

2-Propanol	EC 100 (Daphnia magna, 24 h): > 10,000 mg/l Experimental result, Supporting study EC 50 (Daphnia magna, 24 h): 9,714 mg/l Experimental result, Supporting study LC 50 (Daphnia magna, 24 h): > 10,000 mg/l Experimental result, Key study LC 50 (Common shrimp, sand shrimp (Crangon crangon), 48 h): 900 - 1,950 mg/l Mortality LC 50 (Common shrimp, sand shrimp (Crangon crangon), 96 h): 750 - 1,650 mg/l Mortality
2-Pyrrolidinone, 1-ethenyl-, homopolymer, compd. with iodine	LC 50 (Asiatic clam (Corbicula manilensis), 96 h): > 30,000 mg/l Mortality LC 50 (Northern quahog or hard clam (Mercenaria mercenaria), 12 d): 34.94 mg/l Mortality

Chronic hazards to the aquatic environment:

Fish

Product:	No data available.

Aquatic Invertebrates

Product:	No data available.

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

BOD/COD Ratio

Product:	No data available.

Bioaccumulative potential

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Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Specified substance(s):

2-Propanol	Log Kow: 0.05

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

2-Propanol	No data available.
2-Pyrrolidinone, 1-ethenyl-, homopolymer, compd. with iodine	No data available.

Other adverse effects: No data available.

13. Disposal considerations

General information: 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.

Disposal instructions: Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Contaminated Packaging: No data available.

14. Transport information

DOT

UN Number:	UN 1219
UN Proper Shipping Name:	Isopropanol
Transport Hazard Class(es)	
Class:	3
Label(s):	3
Packing Group:	II
Marine Pollutant:	No
Special precautions for user:	Ltd. Qty

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IMDG

UN Number:	UN 1219
UN Proper Shipping Name:	ISOPROPANOL
Transport Hazard Class(es)	
Class:	3
Subsidiary risk:	3
EmS No.:	F-E, S-D
Packing Group:	II
Environmental Hazards	
Marine Pollutant:	No
Special precautions for user:	Ltd. Qty

IATA

UN Number:	ID 8000
Proper Shipping Name:	Consumer commodity
Transport Hazard Class(es):	
Class:	9
Subsidiary risk:	9MI
Packing Group:	–
Environmental Hazards	
Marine pollutant:	No
Special precautions for user:	LQ

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

CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical Identity	Reportable quantity
2-Propanol	100 lbs.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Fire Hazard
Immediate (Acute) Health Hazards
Flammable (gases, aerosols, liquids, or solids)
Serious eye damage or eye irritation
Specific target organ toxicity (single or repeated exposure)
Hazards Not Otherwise Classified (HNOC)

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SARA 302 Extremely Hazardous Substance
None present or none present in regulated quantities.

SARA 304 Emergency Release Notification
None present or none present in regulated quantities.

SARA 311/312 Hazardous Chemical

Chemical Identity	Threshold Planning Quantity

SARA 313 (TRI Reporting)

Chemical Identity	Reporting threshold for other users	Reporting threshold for manufacturing and processing
2-Propanol	10000 lbs	25000 lbs.

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

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

US State Regulations

US. California Proposition 65
No ingredient requiring a warning under CA Prop 65.

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

Chemical Identity
2-Propanol

US. Massachusetts RTK - Substance List

Chemical Identity
2-Propanol

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity
2-Propanol

US. Rhode Island RTK

Chemical Identity
2-Propanol

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

Issue Date: 05/12/2020

Version #: 1.1

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Revision Information:

Further Information: No data available.

Disclaimer:

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