



Becton, Dickinson and Company BD, Franklin Lakes, NJ 07417 USA www.bd.com

SAFETY DATA SHEET

1. Identification

Product identifier

Product No.:	Product name:	Common name(s), synonym(s)
261192	Dropper Voges-Proskauer A	No data available

Other means of identification

SDS number: 088100178089

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

Health Hazards

Serious Eye Damage/Eye Irritation Category 1

Environmental Hazards

Acute hazards to the aquatic Category 3

environment

Label Elements

Hazard Symbol:



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Signal Word: Danger

Hazard Statement: H225: Highly flammable liquid and vapor.

H318: Causes serious eye damage.

H402: Harmful to aquatic life.

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.

P273: Avoid release to the environment.

Response: P305+P351+P338: IF IN EYES: Rinse cautiously with water for several

minutes. Remove contact lenses, if present and easy to do. Continue

rinsing.

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all

contaminated clothing. Rinse skin with water [or shower]. P310: Immediately call a POISON CENTER/doctor.

P370+P378: In case of fire: Use water spray, fog, CO2, dry chemical, or

alcohol resistant foam.

Storage: P403+P235: Store in a well-ventilated place. Keep cool.

P233: Keep container tightly closed.

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 (%)*
Ethanol		64-17-5	93.8%
1-Naphthalenol		90-15-3	6.2%

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

4. First-aid measures

General information: Causes serious eye irritation. Get medical attention if symptoms occur.

Ingestion: DO NOT induce vomiting. Get medical attention immediately. 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: Get medical attention if any discomfort continues. Provide fresh air, warmth

and rest, preferably in comfortable upright sitting position.

Skin Contact: Wash contact areas with soap and water. Remove contaminated clothing.

Launder contaminated clothing before reuse.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. If easy to do,

remove contact lenses.

Most important symptoms/effects, acute and delayed

Symptoms: No data available.

Hazards: Causes serious eye irritation.

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 spray to keep fire-exposed containers cool. In case of

fire: Evacuate area.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing

media:

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing

media:

Not applicable

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Specific hazards arising from the chemical:

Fire or excessive heat may produce hazardous decomposition products.

Special protective equipment and precautions for firefighters

Special fire fighting procedures:

May travel considerable distance to source of ignition and flash back. May

explode when heated or when exposed to flames or sparks.

Special protective equipment

for fire-fighters:

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in

enclosed spaces, SCBA.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Contact local authorities in case of spillage to drain/aquatic environment. Ensure suitable personal protection (including respiratory protection) during removal of spillages in a confined area.

Methods and material for containment and cleaning up:

All equipment used when handling the product must be grounded. Eliminate sources of ignition. Prevent spreading of vapors through sewers, ventilation systems and confined areas. Absorb spillage with suitable absorbent material. Prevent runoff from entering drains, sewers, or streams. See Section 8 of the SDS for Personal Protective Equipment. For waste

disposal, see section 13 of the SDS.

Environmental Precautions: Avoid rel

Avoid release to the environment.

7. Handling and storage

Precautions for safe handling:

Avoid contact with eyes. Eye wash facilities and emergency shower must be available when handling this product. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke. Read and follow manufacturer's recommendations. Use personal protective equipment as required. Use spark-proof tools and explosion-proof equipment.

Conditions for safe storage, including any incompatibilities:

Keep container tightly closed. Keep in a cool, ventilated location far from heat source and flame

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

occupational Expectato Elimico				
Chemical Identity	Туре	Exposure Limit Values	Source	
Ethanol	TWA	1,000 ppm 1,900 mg/r	13 US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)	
	TWA	1,000 ppm 1,900 mg/r	 US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (06 2008) 	

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AN ESL	1,000 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (12 2010)
ST ESL	10,000 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (12 2010)
AN ESL	1,880 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (12 2010)
ST ESL	18,800 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (12 2010)
TWA PEL	1,000 ppm 1,900 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (08 2010)
STEL	1,000 ppm	US. ACGIH Threshold Limit Values, as amended (12 2010)
REL	1,000 ppm 1,900 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2005)
LEL	3.3 %	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended (10 2017)
IDLH	3,300 ppm	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended (10 2017)
PEL	1,000 ppm 1,900 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)

Appropriate Engineering Controls

Use explosion-proof ventilation equipment. Adequate ventilation should be provided so that exposure limits are not exceeded.

Individual protection measures, such as personal protective equipment

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: Chemical resistant gloves Suitable gloves can be recommended by the

glove supplier. Wash hands after contact.

Other: Wear a lab coat or similar protective clothing.

Respiratory Protection: If engineering controls do not maintain airborne concentrations below

recommended exposure limits (where applicable) or to an acceptable level

(in countries where exposure limits have not been established), an

approved respirator must be worn.

Hygiene measures: Avoid contact with eyes. Wash hands after contact. Observe good industrial

hygiene practices.

9. Physical and chemical properties

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Appearance

Physical state: liquid Form: liquid

Color: Light brown

Odor:

Odor threshold:

PH:

No data available.

Initial boiling point and boiling range: $78 \, ^{\circ}\text{C}$ Flash Point: $13 \, ^{\circ}\text{C}$

Evaporation rate:No data available. **Flammability (solid, gas):**No data available.

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%):

Flammability limit - lower (%):

Explosive limit - upper (%):

Explosive limit - lower (%):

No data available.

Vapor pressure:

Vapor density:

No data available.

No data available.

No data available.

Solubility(ies)

Solubility in water:
Solubility (other):

Partition coefficient (n-octanol/water):

Auto-ignition temperature:

Decomposition temperature:

Viscosity:

Completely Soluble

No data available.

No data available.

No data available.

Not determined.

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:

Not determined.

Conditions to avoid: Avoid exposure to high temperatures or direct sunlight.

Flammable/combustible - Keep away from oxidizers, heat and flames. Keep

away from sources of ignition - No smoking.

Incompatible Materials: Strong oxidizing agents. Water reactive material.

Hazardous Decomposition

Products:

By heating and fire, harmful vapors/gases may be formed. Stable; however,

may decompose if heated.

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11. Toxicological information

General information: No data on possible toxicity effects have been found.

Information on likely routes of exposure

Ingestion: Ingestion may cause severe irritation of the mouth, the esophagus and the

gastrointestinal tract.

Inhalation: Limited inhalation hazard at normal work temperatures.

Skin Contact: Negligible irritation to skin at ambient temperatures.

Eye contact: Irritating to eyes. Elevated temperatures or mechanical action may form

vapors, mist, or fumes which may be irritating to the eyes, nose, throat, or

lungs.

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: 8,064.52 mg/kg

Dermal

Product: ATEmix: 17,741.94 mg/kg

Inhalation

Product: No data available.

Repeated dose toxicity

Product: No data available.

Specified substance(s):

Ethanol Based on available data, the classification criteria are not met.

LOAEL (Rat(Female, Male), Inhalation, 7,318 - 7,496 h): 1.3 mg/l Inhalation Read-across from supporting substance (structural analogue or surrogate),

Weight of Evidence study

NOAEL (Guinea pig, Inhalation, 10.5 Weeks): 3,000 ppm(m) Inhalation

Experimental result, Supporting study

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> LOAEL (Rat(Male), Inhalation, 1 - 6 Weeks): 13.3 mg/l Inhalation Readacross from supporting substance (structural analogue or surrogate),

Supporting study

LOAEL (Monkey, Inhalation, 5 - 20 d): 3.99 mg/l Inhalation Read-across from supporting substance (structural analogue or surrogate), Supporting

study

Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):

Ethanol

in vivo (Rabbit): Not irritant Experimental result, Key study

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

Ethanol in vivo (Rabbit, 24 - 72 hrs): Not irritating EU

Respiratory or Skin Sensitization

Product: No data available.

Specified substance(s):

Ethanol Based on available data, the classification criteria are not met.

Skin sensitization:, in vivo (Guinea pig): Non sensitising

Carcinogenicity

Product: No data available.

Specified substance(s):

Ethanol Based on available data, the classification criteria are not met.

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

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

No carcinogenic components identified

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Germ Cell Mutagenicity

In vitro

Product: No data available.

Specified substance(s):

Ethanol Based on available data, the classification criteria are not met.

In vivo

Product: No data available.

Specified substance(s):

Ethanol Based on available data, the classification criteria are not met.

Reproductive toxicity

Product: No data available.

Specified substance(s):

Ethanol Based on available data, the classification criteria are not met.

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

Specified substance(s):

Ethanol Based on available data, the classification criteria are not met.

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

Specified substance(s):

Ethanol Based on available data, the classification criteria are not met.

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):

Ethanol LC 50 (Fathead Minnow, 96 h): 14,200 mg/l

LC 50 (Fathead Minnow, 96 h): 15,300 mg/l

LC 50 (Rainbow trout, donaldson trout (Oncorhynchus mykiss), 24 h): 11,200

mg/I Mortality

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1-Naphthalenol LC 50 (Pimephales promelas, 96 h): 4.63 mg/l

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Ethanol LC 50 (Water flea (Ceriodaphnia dubia), 48 h): 5,012 mg/l

LC 50 (Grass shrimp,freshwater prawn (Palaemonetes kadiakensis), 18 h):

10,100 mg/l

LC 50 (Grass shrimp, freshwater prawn (Palaemonetes kadiakensis), 96 h):

> 250 mg/l Mortality

LC 50 (Ceriodaphnia dubia, 48 h): 5,012 mg/l Experimental result, Key study

Chronic hazards to the aquatic environment:

Fish

Product: No negative effects on the aguatic environment are known.

Aquatic Invertebrates

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

Toxicity to Aquatic Plants

Product: No data available.

Specified substance(s):

Ethanol EC10 (Green algae (Chlorella vulgaris), 72 h): 11.5 mg/l

EC 50 (Green algae (Chlorella vulgaris), 72 h): 275 mg/l

Persistence and Degradability

Biodegradation

Product: Expected to be readily biodegradable.

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Specified substance(s):

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Ethanol Potential to bioaccumulate is low.

Cyprinus carpio, Bioconcentration Factor (BCF): 4.5 Aquatic sediment Read-

across from supporting substance (structural analogue or surrogate),

Supporting study

Cyprinus carpio, Bioconcentration Factor (BCF): 3 Aquatic sediment Readacross from supporting substance (structural analogue or surrogate),

Supporting study

Leuciscus idus, Bioconcentration Factor (BCF): 0.2 Aquatic sediment Readacross from supporting substance (structural analogue or surrogate), Not

specified

Cyprinus carpio, Bioconcentration Factor (BCF): 1 Aquatic sediment Read-

across from supporting substance (structural analogue or surrogate),

Supporting study

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

Ethanol soil - Very mobile liquid 1-Naphthalenol No data available.

Other adverse effects: Toxic to aquatic organisms.

13. Disposal considerations

General information: Dispose of waste and residues in accordance with local authority

requirements. This product is highly flammable. Don't use fire to cut empty

container after use.

Disposal 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.

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14. Transport information

DOT

UN Number: UN 1993

UN Proper Shipping Name: Flammable liquids, n.o.s.(Ethanol)

Transport Hazard Class(es)

Class: 3
Label(s): 3
Packing Group: II
Marine Pollutant: No

Special precautions for user: This package conforms to 49 CFR 173.4

IMDG

UN Number: UN 1993

UN Proper Shipping Name: FLAMMABLE LIQUID, N.O.S.(Ethanol)

Transport Hazard Class(es)

Class: 3
Subsidiary risk: 3

EmS No.: F-E, S-E

Packing Group:

Environmental Hazards

Marine Pollutant: No

Special precautions for user: EQ

IATA

UN Number: UN 1993

Proper Shipping Name: Flammable liquid, n.o.s.(Ethanol)

Transport Hazard Class(es):

Class: 3
Subsidiary risk: 3
Packing Group: II

Environmental Hazards

Marine pollutant: No

Special precautions for user: EQ

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.

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CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical Identity Reportable quantity

Ethanol 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
Hazards Not Otherwise Classified (HNOC)

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

<u>Chemical Identity</u> <u>Threshold Planning Quantity</u>

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

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

WARNING: This product can expose you to chemicals including, Ethanol, which is [are] known to the State of California to cause cancer and birth defects or other reproductive harm.

For more information go to www.P65Warnings.ca.gov.

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

Chemical Identity

Ethanol

US. Massachusetts RTK - Substance List

Chemical Identity

Ethanol

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US. Pennsylvania RTK - Hazardous Substances Chemical Identity

Ethanol

US. Rhode Island RTK

<u>Chemical Identity</u>

Ethanol

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

Issue Date: 04/06/2020

Version #: 2.1

Revision Information:

Further Information: No data available.

Disclaimer: Disclaimer:

The information contained herein has been obtained from various sources and is believed to be correct as of the date issued. However, neither BD nor any of its subsidiaries assumes any liabilities whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability for a particular use of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. BD provides SDS in electronic form so the information may be more easily accessed. Due to the possibility of errors during transmission, BD makes no representations as to the completeness or accuracy of the information.

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