

Version: 1.1 Last revised date: 03/16/2021

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

SAFETY DATA SHEET

Product name:	Common name(s), synonym(s)
BD BBL [™] Voges-Proskauer B Reagent Droppers	No data available
	BD BBL [™] Voges-Proskauer

Other means of identification SDS number: 088100178088

Recommended use and restriction on use

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

Manufacturer/Importer/Supplier/Distributor Information

Manufacturer

Company Name:	BD, Integrated Diagnostic Solutions
Address:	7 Loveton Circle
	Sparks, MD 21152 USA
Telephone:	1 844 823 5433
Fax:	not available
Contact Person:	Tech Services

Emergency telephone number: CHEMTREC 1 800 424 9300

2. Hazard(s) identification

Hazard Classification

Health Hazards

Acute toxicity (Oral)	Category 4
Skin Corrosion/Irritation	Category 1
Serious Eye Damage/Eye Irritation	Category 1

Environmental Hazards



Acute hazards to the aquatic	Category 3
environment	
Chronic hazards to the aquatic environment	Category 3

Label Elements

Hazard Symbol:



Signal Word:	Danger
Hazard Statement:	H302: Harmful if swallowed. H314: Causes severe skin burns and eye damage. H412: Harmful to aquatic life with long lasting effects.
Precautionary Statements	
Prevention:	P264: Wash thoroughly after handling. P270: Do not eat, drink or smoke when using this product. P260: Do not breathe dust/fume/gas/mist/vapors/spray. P280: Wear protective gloves/protective clothing/eye protection/face protection. P273: Avoid release to the environment.
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. P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. P301+P312: IF SWALLOWED: Call a POISON CENTRE/doctor/ if you feel unwell. P330: Rinse mouth. P331: Do NOT induce vomiting.



	P310: Immediately call a POISON CENTER/doctor. P321: Specific treatment (see on this label). P363: Wash contaminated clothing before reuse.
Storage:	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:	None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
Potassium hydroxide (K(OH))	No data available.	1310-58-3	40%

* 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 severe skin burns and eye damage. Get immediate medical advice/attention.
Ingestion:	Call a physician or poison control center immediately. Rinse mouth thoroughly. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs.
Inhalation:	Move to fresh air. Get medical attention if any discomfort continues.



Skin Contact:	Take off immediately all contaminated clothing. Rinse skin with water [or shower]. Get medical attention promptly if symptoms occur after washing.	
Eye contact:	Important! Immediately rinse with water for 60 minutes. Get medical attention immediately. Continue to rinse.	
Most important symptoms/	effects, acute and delayed	
Symptoms:	Symptoms may be delayed.	
Hazards:	Causes severe skin burns and eye damage.	
Indication of immediate me	dical attention and special treatment needed	
Treatment:	IF exposed or concerned: Get 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.	
Suitable (and unsuitable) extinguishing media		
Suitable extinguishing media:	Use water fog, alcohol-resistant foam, dry chemical or carbon dioxide (CO2) to extinguish flames.	
Unsuitable extinguishing media:	Do not use water jet as an extinguisher, as this will spread the fire.	
Specific hazards arising from the chemical:	Fire or excessive heat may produce hazardous decomposition products.	
Special protective equipme	nt and precautions for firefighters	
Special fire fighting procedures:	No unusual fire or explosion hazards noted.	



Special protective	Fire
equipment for fire-	flam
fighters:	boo

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. Ventilate closed spaces before entering them. Avoid breathing mists or vapors. Keep unauthorized personnel away.
Methods and material for containment and cleaning up:	Stop leak if possible without any risk. Prevent runoff from entering drains, sewers, or streams. Dike far ahead of larger spills for later disposal. Absorb in vermiculite, dry sand or earth and place into containers. See Section 8 of the SDS for Personal Protective Equipment. For waste disposal, see section 13 of the SDS.
Environmental Precautions:	Do not contaminate water sources or sewer.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation):	Adequate ventilation should be provided so that exposure limits are not exceeded. Eye wash facilities and emergency shower must be available when handling this product.
Safe handling advice:	Avoid contact with eyes and prolonged or repeated contact with skin. Avoid inhalation of vapors and spray mists. Observe good industrial hygiene practices. Wear appropriate personal protective equipment. Provide good ventilation.
Contact avoidance measures:	No data available.
Hygiene measures:	Observe good industrial hygiene practices. Wash at the end of each work shift and before eating, smoking and using the toilet.
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Storage

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Safe storage conditions:	Store in original tightly closed container. Store in a cool, dry place with adequate ventilation. Keep away from incompatible materials, open flames, and high temperatures.
Safe packaging materials:	No data available.
Storage Temperature:	No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Туре	Exposure Limit Values	Source
Potassium hydroxide (K(OH))	Ceiling	2 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
	Ceiling	2 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (06 2008)
Potassium hydroxide (K(OH)) - Particulate.	AN ESL	2 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (07 2011)
	ST ESL	20 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (07 2011)
Potassium hydroxide (K(OH))	Ceiling	2 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (08 2010)
	Ceiling	2 mg/m3	US. ACGIH Threshold Limit Values, as amended (12 2010)
	Ceil_Time	2 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2016)

Appropriate Engineering Controls

Adequate ventilation should be provided so that exposure limits are not exceeded. Eye wash facilities and emergency shower must be available when handling this product.



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) and a face shield.
Skin Protection Hand Protection:	Suitable gloves can be recommended by the glove supplier.
Other:	Chemical resistant clothing
Respiratory Protection:	In case of inadequate ventilation use suitable respirator.
Hygiene measures:	Observe good industrial hygiene practices. Wash at the end of each work shift and before eating, smoking and using the toilet.

9. Physical and chemical properties

Ар	pea	rance
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Physical state:	liquid
Form:	liquid
Color:	According to product specification.
Odor:	Characteristic
Odor threshold:	No data available.
pH:	12.9 - 13.3 No data available.
Melting point/freezing point:	No data available.
Initial boiling point and boiling range:	No data available.
Flash Point:	Not applicable
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 (%): Flammability limit - lower (%): Explosive limit - upper: Explosive limit - lower: Vapor pressure: Vapor density: Relative density: Solubility(ies)	No data available. No data available. No data available. No data available. No data available. No data available. No data available.
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.

10. Stability and reactivity

Reactivity:	Product is not reactive under normal conditions and recommended use.
Chemical Stability:	No data available.
Possibility of hazardous reactions:	Stable; however, may decompose if heated.
Conditions to avoid:	Avoid exposure to high temperatures or direct sunlight. Do not freeze.
Incompatible Materials:	Avoid contact with oxidizers or reducing agents.
Hazardous Decomposition Products:	By heating and fire, corrosive vapors/gases may be formed.

11. Toxicological information



Ingestion:	No data available.
Inhalation:	No data available.
Skin Contact:	No data available.

Eye contact: No data available.

Symptoms related to the physical, chemical and toxicological characteristics Ingestion: No data available.

Inhalation:	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: 832.5 mg/kg
Dermal Product:	No data available.
Inhalation Product:	No data available.

Repeated dose toxicity	
Product:	No data available.

Skin Corrosion/Irritation Product: No data available.



Specified substance(s):

Potassium hydroxide (K(OH)) in vivo (Guinea pig): Corrosive Experimental result, Weight of Evidence study in vivo (Rabbit): Corrosive Experimental result, Weight of Evidence study

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

Potassium hydroxide in vivo (Rabbit, 24 hrs): Corrosive KOH 5% (K(OH)) in vivo (Rabbit, 5 min): Corrosive KOH 5%

Respiratory or Skin Sensitization

Product:

No data available.

Specified substance(s):

Potassium hydroxide Skin sensitization:, in vivo (Guinea pig): Non sensitising (K(OH))

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

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended: No carcinogenic components identified



Germ Cell Mutagenicity In vitro No data available. **Product:** In vivo No data available. **Product: Reproductive toxicity** Product: No data available. Specific Target Organ Toxicity - Single Exposure No data available. **Product:** Specific Target Organ Toxicity - Repeated Exposure No data available. **Product: Aspiration Hazard** No data available. Product: **Other effects:** No data available. 12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: Not expected to be harmful to aquatic organisms.

Aquatic Invertebrates Product: No data available.

Specified substance(s	5):
Potassium hydroxide	ED 0 (Dreissena polymorpha, 2 d): $< 1 \text{ mg/l Experimental result}$,
(K(OH))	Supporting study
	11/16



EC 100 (Dreissena polymorpha, 2 d): > 10 mg/l Experimental result, Supporting study

Chronic hazards to the aquatic environment:

Fish Product:

No data available.

- Aquatic Invertebrates Product: No data available.
- Toxicity to Aquatic PlantsProduct:No data available.

Persistence and Degradability

BiodegradationProduct:No data available.

BOD/COD Ratio Product: No data available.

Bioaccumulative potential Bioconcentration Factor (BCF) Product: No data available.

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 compartmentsPotassium hydroxideNo data available.(K(OH))(Kingle content of the second second



Other adverse effects: No data available.

13. Disposal considerations

General information:	Dispose of waste and residues in accordance with local authority requirements.
Disposal instructions:	This material and/or its container must be disposed of as hazardous waste.
Contaminated Packaging:	No data available.

14. Transport information

DOT

UN Number:	UN 1814
UN Proper Shipping Name:	Potassium hydroxide, solution
Transport Hazard Class(es)	
Class:	8
Label(s):	8
Packing Group:	III
Marine Pollutant:	No
Special precautions for user:	This package conforms to 49 CFR 173.4



IMDG

UN Number:	UN 1814
UN Proper Shipping Name:	POTASSIUM HYDROXIDE SOLUTION
Transport Hazard Class(es)	
Class:	8
Subsidiary risk:	8
EmS No.:	F-A, S-B
Packing Group: Environmental Hazards	III
Marine Pollutant:	No
Special precautions for user:	EQ
ΙΑΤΑ	
UN Number:	UN 1814
Proper Shipping Name: Transport Hazard Class(es):	Potassium hydroxide solution
Class:	8
Subsidiary risk:	8
Packing Group: Environmental Hazards	III
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. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)

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

POTASSIUM HYDROXIDE

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Acute toxicity (any route of exposure), Skin Corrosion or Irritation, Serious eye damage or eye irritation

US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances

None present or none present in regulated quantities.

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required 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.

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

Chemical Identity

Potassium hydroxide (K(OH))

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

Potassium hydroxide (K(OH))

US. Massachusetts RTK - Substance List

Chemical Identity

Potassium hydroxide (K(OH))



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US. Pennsylvania RTK - Hazardous Substances

<u>Chemical Identity</u> Potassium hydroxide (K(OH))

US. Rhode Island RTK <u>Chemical Identity</u>

Potassium hydroxide (K(OH))

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

Issue Date:	03/16/2021
Version #:	1.1
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.