



Be Right™

SAFETY DATA SHEET

Product Name BOD Standard Solution for Dilution Method

Issue Date 24-Oct-2022

Revision Date 28-Aug-2024

Version 1.4

1. Identification

Product identifier

Product Name BOD Standard Solution for Dilution Method

Other names

Product Code(s) 1486510

Synonyms None.

Safety data sheet number M00669

Pure substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Recommended Use Determination of biochemical oxygen demand. Water Analysis.

Uses advised against Consumer use.

Manufacturer, importer or supplier name, address and telephone number

Manufacturer Address

Hach Company, P.O.Box 389, Loveland, CO 80539, USA, +1(970) 669-3050

Emergency telephone number

Taiwan

Emergency Telephone +1(303) 623-5716 - 24 Hour Service

2. Hazard(s) identification

Chemical hazard classification

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

Label elements

Hazard statements

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

Other hazards

No information available.

3. Composition/information on ingredients

Chemical Family Mixture

Substance

Not applicable.

Mixture

Chemical nature aqueous solution.

The product contains no substances known to be hazardous to health or to the environment in concentrations which need to be taken into account.

Chemical name	English chemical name	Formula	CAS No.	Percent Range
Glucose	Glucose	C ₆ H ₁₂ O ₆	50-99-7	<0.1%

4. First-aid measures

Different exposure routes and first aid procedures

Inhalation	Remove to fresh air.
Skin contact	Wash skin with soap and water.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Ingestion	Rinse mouth.
<u>Most important symptoms and effects</u>	No information available.
<u>Self-protection of the first aider</u>	No information available.
<u>Note to physicians</u>	Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Small Fire

Large Fire

Dry chemical or CO₂.

CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the chemical No information available.

Hazardous combustion products This material will not burn.

<u>Specific/special fire-fighting measures</u>	Fires need to be assessed to determine appropriate protocols and safety measures for firefighting, including establishing safe zones, extinguishing media to be used, firefighter protection, and actions to control or extinguish the fire.
<u>Special protective equipment for fire-fighters</u>	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

6. Accidental release measures

<u>Personal precautions</u>	Ensure adequate ventilation.
Reference to other sections	See section 8 for more information. See section 13 for more information.
For emergency responders	Use personal protection recommended in Section 8.
<u>Environmental precautions</u>	See Section 12 for additional Ecological Information.
<u>Methods for cleaning up</u>	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Take up mechanically, placing in appropriate containers for disposal.
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.

7. Handling and storage

<u>Handling</u>	Handle in accordance with good industrial hygiene and safety practice.
<u>Storage</u>	Keep containers tightly closed in a dry, cool and well-ventilated place.
Incompatible materials	None known based on information supplied.

8. Exposure controls/personal protection

<u>Engineering controls</u>	Showers Eyewash stations Ventilation systems.
<u>Control parameters</u>	
Occupational exposure limits	This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies
Legend	See section 16 for terms and abbreviations
Biological limit value	This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.
<u>Personal protective equipment</u>	
Respiratory protection	Ensure adequate ventilation.
Eye/face protection	No special protective equipment required.
Hand protection	No special protective equipment required.

Skin and body protection No special protective equipment required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance	aqueous solution	Odor	Odorless
Physical state	Liquid	Odor threshold	No information available
Color	colorless		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Molecular weight	No data available	
pH	3.4	@ 20 °C
Melting point / freezing point	~ 0 °C / 32 °F	
Initial boiling point and boiling range	~ 100 °C / 212 °F	
Evaporation rate	1 (water = 1)	
Vapor pressure	17.477 mm Hg / 2.33 kPa at 20 °C / 68 °F	
Relative vapor density	0.62	
Specific gravity - VALUE 1	1.000	
Partition coefficient	Not applicable	
Soil Organic Carbon-Water Partition Coefficient	Not applicable	
Autoignition temperature	No data available	
Decomposition temperature	No information available	
Dynamic viscosity	~ 1 cP (mPa s) at 20 °C / 68 °F	
Kinematic viscosity	~ 1 cSt (mm ² /s) at 20 °C / 68 °F	

Solubility(ies)

Water solubility

<u>Water solubility classification</u>	<u>Water solubility</u>	<u>Water Solubility Temperature</u>
Soluble	> 1000 mg/L	25 °C / 77 °F

Solubility in other solvents

<u>Solvent</u>	<u>Solubility</u>	<u>Water Solubility Temperature</u>
Acid	Soluble	> 1000 mg/L 25 °C / 77 °F
Aqueous alkaline solutions	Soluble	> 1000 mg/L 25 °C / 77 °F

Other information

Corrosive to metals

Steel Corrosion Rate	No data available
Aluminum Corrosion Rate	No data available

Volatile Organic Compounds (VOC) Content**Explosive properties**

Upper explosion limit	Not applicable
Lower explosion limit	Not applicable

Flammable properties

Flash point	No data available
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Flammability Limit in Air

Upper flammability limit:	No data available
Lower flammability limit:	No data available

Oxidizing properties

No data available.

Other information

VOC content	No information available
Bulk density	No information available

10. Stability and reactivity**Stability** Stable under normal conditions.**Reactivity** No information available.**Sensitivity to mechanical impact** None.**Sensitivity to static discharge** None.**Possibility of hazardous reactions** None under normal processing.**Hazardous polymerization** None under normal processing.**Conditions to avoid** None known based on information supplied.**Incompatible materials** None known based on information supplied.**Hazardous Decomposition Products** No information available.**11. Toxicological information****Information on likely routes of exposure****Product Information****Inhalation** Specific test data for the substance or mixture is not available.**Eye contact** Specific test data for the substance or mixture is not available.**Skin contact** Specific test data for the substance or mixture is not available.**Ingestion** Specific test data for the substance or mixture is not available.**Symptoms** No information available.**Acute toxicity**

Numerical measures of toxicity - Product Information**Ingredient Acute Toxicity Data**

No data available.

Skin corrosion/irritation

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

Mixture

No data available.

Ingredient Skin Corrosion/Irritation Data

No data available.

Serious eye damage/eye irritation

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

Mixture

No data available.

Ingredient Eye Damage/Eye Irritation Data

No data available.

Respiratory or skin sensitization

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

Mixture

No data available.

Ingredient Sensitization Data

No data available.

STOT - single exposure

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

Mixture

No data available.

Substance

No data available.

STOT - repeated exposure

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

Mixture

No data available.

Ingredient Specific Target Organ Toxicity Repeat Exposure Data

No data available.

Carcinogenicity

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

Mixture

No data available.

Ingredient Carcinogenicity Data

No data available.

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)	Does not apply
NTP (National Toxicology Program)	Does not apply
OSHA	Does not apply

Germ cell mutagenicity

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

Mixture invitro Data

No data available.

Substance invitro Data

No data available.

Mixture invivo Data

No data available.

Substance invivo Data

No data available.

Reproductive toxicity

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

Mixture

No data available.

Ingredient Reproductive Toxicity Data

No data available.

Aspiration hazard

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

12. Ecological information

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Unknown aquatic toxicity

0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Mixture**Aquatic Acute Toxicity**

No data available.

Aquatic Chronic Toxicity

No data available.

Substance**Aquatic Acute Toxicity**

No data available.

Aquatic Chronic Toxicity

No data available.

Persistence and degradability**Mixture**

No data available.

Bioaccumulation**Mixture**

No data available.

Partition coefficient

Not applicable

Mobility

Soil Organic Carbon-Water Partition Coefficient Not applicable

Other adverse effects

No information available.

13. Disposal considerations

Disposal methods

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. Do not reuse empty containers.

14. Transport information

DOT Not regulated

IMDG Not regulated

IATA Not regulated

China Not regulated

Additional information

There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is not in a reagent set or kit, the classification given above applies.

If the item is part of a reagent set or kit the classification would change to the following:

UN3316 Chemical Kit, Hazard Class 9, Packing Group II or III.

If the item is not regulated, the Chemical Kit classification does not apply.

15. Regulatory information

Regulatory information

National Regulations

See section 8 for national exposure control parameters

Applicable regulations: No information available

Toxic and Concerned Chemical Substances Control Act

International Inventories

TCSI	Contact supplier for inventory compliance status.
TSCA	Complies.
DSL/NDSL	Complies.
EINECS/ELINCS	Complies.
ENCS	Complies.
IECSC	Complies.
KECL	Complies.
PICCS	Complies.
AICS	Complies.
NZIoC	-.

TCSI - *Taiwan Chemical Substance Inventory*

TSCA - *United States Toxic Substances Control Act Section 8(b) Inventory*
 DSL/NDSL - *Canadian Domestic Substances List/Non-Domestic Substances List*
 EINECS/ELINCS - *European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*
 ENCS - *Japan Existing and New Chemical Substances*
 KECL - *Korean Existing and Evaluated Chemical Substances*
 IECSC - *China Inventory of Existing Chemical Substances*
 PICCS - *Philippines Inventory of Chemicals and Chemical Substances*
 AICS - *Australian Inventory of Chemical Substances*
 NZIoC - *New Zealand Inventory of Chemicals*

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

16. Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

ACGIH	ACGIH (American Conference of Governmental Industrial Hygienists)
ATSDR	ATSDR (Agency for Toxic Substances and Disease Registry)
CCRIS	CCRIS (Chemical Carcinogenesis Research Information System)
CDC	CDC (Center for Disease Control)
CEPA	CEPA (Canadian Environmental Protection Agency)
CICAD	CICAD (Concise International Chemical Assessment Documents)
ECHA	ECHA (The European Chemicals Agency)
EEA	EEA (European Environment Agency)
EPA	EPA (Environmental Protection Agency)
ERMA	ERMA (New Zealand's Environmental Risk Management Authority)
ECOSARS	Estimation through ECOSARS v1.11 part of the Estimation Programs Interface (EPI) Suite™
FDA	FDA (Food & Drug Administration)
GESTIS	GESTIS (Information System on Hazardous Substances of the German Social Accident Insurance)
HSDB	HSDB (Hazardous Substances Data Bank)
INERIS	INERIS (The National Industrial Environment and Risks Institute)
IPCS INCHEM	IPCS INCHEM (International Programme on Chemical Safety)
IUCLID	IUCLID (The International Uniform Chemical Information Database)
NITE	Japan National Institute of Technology and Evaluation (NITE)
NIH	NIH (National Institutes of Health)
NIOSH	NIOSH (National Institute for Occupational Safety and Health)
LOLI	LOLI (List of Lists - An International Chemical Regulatory Database)
NDF	no data
NICNAS	Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH IDLH	Immediately Dangerous to Life or Health
OSHA	OSHA (Occupational Safety and Health Administration of the US Department of Labor)
PEEN	PEEN (Pan European Ecological Network)
RTECS	RTECS (Registry of Toxic Effects of Chemical Substances)
SIDS	SIDS (Screening Information Dataset) for High Volume Chemicals
SYKE	The Finnish Environment Institute (SYKE)
USDA	USDA (United States Department of Agriculture)
USDC	USDC (United States Department of Commerce)
WHO	WHO (World Health Organization)

Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Ceiling Limit Value	MAC	Maximum Allowable Concentration

X	Listed	Vacated	These values have no official status. The only binding levels of contaminants are those listed in the final OSHA PEL. These lists are for reference purposes only. Please note that some reference state regulations of these "liberated" exposure limits in their state regulations.
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SKN*	Skin designation	SKN+	Skin sensitization
RSP+	Respiratory sensitization	**	Hazard Designation
C	Carcinogen	R	Reproductive toxicant
M	mutagen		

Prepared By	Hach Product Compliance Department
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Revision Note	None
Reference Sources for Section 11	See Section 11: TOXICOLOGICAL INFORMATION

Disclaimer

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

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End of Safety Data Sheet