

# SAFETY DATA SHEET

Issue Date 07-Aug-2020 Revision Date Version 2.4 Page 1 / 11

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# 1. IDENTIFICATION

**Product identifier** 

Product Name BOD Standard Solution for Dilution Method

Other means of identification

Product Code(s) 1486510

Safety data sheet number M00669

Recommended use of the chemical and restrictions on use

**Recommended Use** Determination of biochemical oxygen demand. Water Analysis.

Uses advised against Consumer use.

**Restrictions on use** For Laboratory Use Only.

#### Details of the supplier of the safety data sheet

#### **Manufacturer Address**

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

#### Emergency telephone number

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

## 2. HAZARDS IDENTIFICATION

## Classification

#### **Regulatory Status**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

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

#### Hazards not otherwise classified (HNOC)

Not applicable

## Label elements

# Signal word

None

## **Hazard statements**

The product contains no substances which at their given concentration, are considered to be hazardous to health

#### Other Hazards Known

None

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## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable

**Mixture** 

**Chemical Family** Mixture.

Chemical nature aqueous solution.

# 4. FIRST AID MEASURES

**Description of first aid measures** 

General advice No hazards which require special first aid measures. Use first aid treatment according to

the nature of the injury.

Inhalation Remove to fresh air.

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Eye contact

Consult a physician.

Skin contact Wash skin with soap and water.

Ingestion Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed

**Symptoms** See Section 11 for additional Toxicological Information.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

# 5. FIRE-FIGHTING MEASURES

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

surrounding environment.

**Unsuitable Extinguishing Media** Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the

chemical

No information available.

**Hazardous combustion products** This material will not burn.

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout

gear. Use personal protection equipment.

# 6. ACCIDENTAL RELEASE MEASURES

Only persons properly qualified to respond to an emergency involving hazardous **U.S. Notice** 

substances may respond to a spill according to federal regulations (OSHA 29 CFR

1910.120(a)(v)) and per your company's emergency response plan and

guidelines/procedures. See Section 13, Special Instructions for disposal assistance. Outside of the US, only persons properly qualified according to state or local regulations

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should respond to a spill involving chemicals.

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

Environmental precautions

See Section 12 for additional ecological information. **Environmental precautions** 

Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so. **Methods for containment** 

Methods for cleaning up 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.

Clean contaminated objects and areas thoroughly observing environmental regulations. Prevention of secondary hazards

Reference to other sections See section 8 for more information. See section 13 for more information.

# 7. HANDLING AND STORAGE

Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Advice on safe handling

Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

Not applicable Flammability class

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

This product, as supplied, does not contain any hazardous materials with occupational **Exposure Guidelines** 

exposure limits established by the region specific regulatory bodies

Appropriate engineering controls

**Engineering Controls** 

Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required. Ensure

adequate ventilation.

**Hand Protection** Wear suitable gloves.

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

Skin and body protection No special protective equipment required.

Handle in accordance with good industrial hygiene and safety practice. **General Hygiene Considerations** 

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Environmental exposure controls Local authorities should be advised if significant spillages cannot be contained. Do not

allow into any sewer, on the ground or into any body of water.

Thermal hazards None under normal processing.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Information on basic physical and chemical properties

Physical state

Liquid

Appearance aqueous solution Odor Odorless

Color colorless

Odor threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

Molecular weight No data available

pH 3.4 @ 20 °C

Melting point/freezing point  $\sim 0 \, ^{\circ}\text{C} \, / \, 32 \, ^{\circ}\text{F}$ 

Boiling point / 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 (water = 1 / air = 1) 1.000

Partition Coefficient (n-octanol/water)

Not applicable

Soil Organia Carbon Water Partition

Not applicable

**Soil Organic Carbon-Water Partition** 

**Autoignition temperature** 

Coefficient

Not applicable

No data available

•

**Decomposition temperature**No information available

**Dynamic viscosity**  $\sim 1 \text{ cP (mPa s)}$  at 20 °C / 68 °F

Kinematic viscosity ~ 1 cSt (mm²/s) at 20 °C / 68 °F

Solubility(ies)

#### Water solubility

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

## Solubility in other solvents

Chemical Name_	Solubility classification	Solubility	Solubility Temperature
Acid	Soluble	> 1000 mg/L	25 °C / 77 °F
Aqueous alkaline solutions	Soluble	> 1000 mg/L	25 °C / 77 °F

#### **Other information**

#### Metal Corrosivity

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Steel Corrosion RateNo data availableAluminum Corrosion RateNo data available

**Volatile Organic Compounds (VOC) Content** 

**Explosive properties** 

Upper explosion limitNot applicableLower explosion limitNot applicable

Flammable properties

Flash point No data available

Flammability Limit in Air

Upper flammability limit:No data availableLower flammability limit:No data available

Oxidizing properties No data available.

Bulk density Not applicable

# 10. STABILITY AND REACTIVITY

#### Reactivity

Not applicable.

## **Chemical stability**

Stable under normal conditions.

## **Explosion data**

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

Strong oxidizing agents, strong acids, and strong bases.

#### Hazardous decomposition products

No information available.

# 11. TOXICOLOGICAL INFORMATION

## Information on likely routes of exposure

#### **Product Information**

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**Inhalation** No known effect based on information supplied.

**Eye contact** No known effect based on information supplied.

**Skin contact** No known effect based on information supplied.

**Ingestion** No known effect based on information supplied.

**Symptoms** No information available.

#### **Acute toxicity**

Based on available data, the classification criteria are not met

## **Product Acute Toxicity Data**

No data available.

## **Ingredient Acute Toxicity Data**

No data available.

#### **Unknown Acute Toxicity**

0% of the mixture consists of ingredient(s) of unknown toxicity.

## **Acute Toxicity Estimations (ATE)**

ATEmix (oral)	No information available
ATEmix (dermal)	No information available
ATEmix (inhalation-dust/mist)	No information available
ATEmix (inhalation-vapor)	No information available
ATEmix (inhalation-gas)	No information available

# Skin corrosion/irritation

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

#### **Product Skin Corrosion/Irritation Data**

No data available.

# Ingredient Skin Corrosion/Irritation Data

No data available.

# Serious eye damage/irritation

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

## **Product Serious Eye Damage/Eye Irritation Data**

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.

# **Product Sensitization Data**

No data available.

## **Ingredient Sensitization Data**

No data available.

## STOT - single exposure

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

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# **Product Specific Target Organ Toxicity Single Exposure Data**

No data available.

## **Ingredient Specific Target Organ Toxicity Single Exposure Data**

No data available.

#### STOT - repeated exposure

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

## **Product Specific Target Organ Toxicity Repeat Dose Data**

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.

## **Product Carcinogenicity Data**

No data available.

## **Ingredient Carcinogenicity Data**

No data available.

#### Legend

ACGIH (American Conference of Governmental Industrial Hygienists)	Does not apply
IARC (International Agency for Research on Cancer)	Does not apply
NTP (National Toxicology Program)	Does not apply
OSHA (Occupational Safety and Health Administration of the US Department of	Does not apply
Labor)	

#### Germ cell mutagenicity

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

## Product Germ Cell Mutagenicity invitro Data

No data available.

## Ingredient Germ Cell Mutagenicity invitro Data

No data available.

## Product Germ Cell Mutagenicity invivo Data

No data available.

## Ingredient Germ Cell Mutagenicity invivo Data

No data available.

## Reproductive toxicity

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

## **Product Reproductive Toxicity Data**

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

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

**Unknown aquatic toxicity** 0 % of the mixture consists of component(s) of unknown hazards to the aquatic

environment.

**Product Ecological Data** 

Aquatic Acute Toxicity
No data available.

**Aquatic Chronic Toxicity** 

No data available.

Ingredient Ecological Data

Aquatic Acute Toxicity
No data available.

Aquatic Chronic Toxicity No data available.

Persistence and degradability

**Product Biodegradability Data** 

No data available.

**Product Bioaccumulation Data** 

No data available.

Partition Coefficient (n-octanol/water)

Not applicable

**Mobility** 

Soil Organic Carbon-Water Partition Coefficient Not applicable

Other adverse effects
No information available

# 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

US EPA Waste Number Not applicable

Special instructions for disposal Open cold water tap completely, slowly pour the material to the drain. Flush system with

plenty of water.

14. TRANSPORT INFORMATION

**DOT** Not regulated

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TDGNot regulatedIATANot regulatedIMDGNot 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

**National Inventories** 

TSCA Complies DSL/NDSL Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

#### **International Inventories**

**EINECS/ELINCS** Complies **ENCS** Complies **IECSC** Complies Complies **KECL - Existing substances PICCS** Complies Complies **TCSI AICS** Complies **NZIoC** Complies

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**TCSI** - Taiwan Chemical Substances Inventory

**AICS** - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

## **US Federal Regulations**

#### <u>SARA 313</u>

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

## SARA 311/312 Hazard Categories

Acute health hazard No
Chronic Health Hazard No
Fire hazard No
Sudden release of pressure hazard No
Reactive Hazard No

#### **CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

#### **CERCLA**

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This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

## **US State Regulations**

#### **California Proposition 65**

This product does not contain any Proposition 65 chemicals

IMERC: Not applicable

#### U.S. State Right-to-Know Regulations

This product may contain substances regulated by state right-to-know regulations.

## **U.S. EPA Label Information**

# 16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

#### **Special Comments**

None

# **Additional information**

## **Global Automotive Declarable Substance List (GADSL)**

Not applicable

#### NFPA and HMIS Classifications

	NFPA	Health hazards - 0	Flammability - 0	Instability - 0	Physical and chemical properties -
	HMIS	Health hazards - 0	Flammability - 0	Physical hazards - 0	Personal protection -
-			_	_	X
1					- I

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

NIOSH IDLH Immediately Dangerous to Life or Health

ACGIH (American Conference of Governmental Industrial Hygienists)

NDF no data

# Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
MAC	Maximum Allowable Concentration	Ceiling	Ceiling Limit Value
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.
SKN* RSP+ C	Skin designation Respiratory sensitization Carcinogen	SKN+ ** R	Skin sensitization Hazard Designation Reproductive toxicant

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M mutagen

Prepared By Hach Product Compliance Department

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Revision Note None

#### **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** 

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