

## SAFETY DATA SHEET

# DAB Substrate Kit

## SECTION 1: Identification

### 1.1. Product identifier

#### Trade name

DAB Substrate Kit

#### Other names / Synonyms

30015: DAB Substrate Kit, 1 kit

#### Kit Components:

30015A: DAB Substrate, 20X, 15 mL

30015B: Stabilized Peroxide Buffer, 20X, 15 mL

#### Product no.

30015

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### Relevant identified uses of the substance or mixture

Use as laboratory reagent. For research use only. Not for food, drug, household, or cosmetic use.

Restricted to professional users.

#### Uses advised against

Use as laboratory reagent. For research use only. Not for food, drug, household, or cosmetic use.

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

#### Company and address

##### **Biotium, Inc.**

46117 Landing Parkway

CA 94538 Fremont

USA

T: +1 510-265-1027

Fax: +1 510-265-1352

<http://www.biotium.com>

#### E-mail

[techsupport@biotium.com](mailto:techsupport@biotium.com)

#### SDS date

4/30/2025

#### SDS Version

1.0

### 1.4. Emergency telephone number

Contact the poison control at 1-800-222-1222 (24/7) or use the webPOISONCONTROL® ([triage.webpoisoncontrol.org](http://triage.webpoisoncontrol.org)) to get specific guidance for your case  
See also section 4 "First aid measures".

## SECTION 2: Hazard(s) identification

### 2.1. Classification of the substance or mixture

See individual kit component SDS attached.

Not classified according to HCS (29 CFR 1910.1200)

### 2.2. Label elements

See individual kit component SDS attached.

#### Hazard pictogram(s)

Not applicable.

#### Signal word

Not applicable.

#### Hazard statement(s)

#### Precautionary statement(s)

#### General

-

#### Prevention

-

#### Response

-

#### Storage

-

#### Disposal

-

#### Additional labelling

Not applicable.

### 2.3. Other hazards

See individual kit component SDS attached.

## SECTION 3: Composition/Information on Ingredients

### 3.1. Substances

Not applicable. This product is a mixture.

### 3.2. Mixtures

Does not contain any substances required to report

Where the concentration of an ingredient is expressed as a range the exact concentration has been withheld as a trade secret.

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

#### Other information

-

See individual kit component SDS attached.

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

#### General information

If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 911 and give immediate treatment (first aid).

Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

#### Inhalation

In case of discomfort: bring the person into fresh air.

#### Skin contact

Upon irritation: rinse with water. In the event of continued irritation, seek medical assistance.

#### Eye contact

Rinse gently with lukewarm water. Remove any contact lenses if this is easy to do. Continue rinsing. In case of persistent eye irritation or discomfort: Seek medical help.

#### Ingestion

Rinse and flush mouth thoroughly and consume large quantities of water. In case of continued discomfort: seek medical assistance and bring this safety data sheet.

#### Burns

Not applicable.

### 4.2. Most important symptoms and effects, both acute and delayed

None known.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

#### Information to medics

Bring this safety data sheet or the label from this product.

## SECTION 5: Fire-fighting measures

### 5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

### 5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

### 5.3. Advice for firefighters

No specific requirements.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Contaminated areas may be slippery.

### 6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

Keep unauthorized persons away from the spill

### 6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

### 6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

### 7.2. Conditions for safe storage, including any incompatibilities

#### Recommended storage material

No specific requirements

#### Storage conditions

Refer to section 7 of each kit component SDS (appended) for proper storage conditions for each kit component.

#### Incompatible materials

No specific requirements

### 7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No substances are listed with a permissible exposure limit (ref: 29 CFR 1910.1000 TABLE Z-1)

### 8.2. Exposure controls

Apply general control to prevent unnecessary exposure

#### General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

#### Exposure scenarios

There are no exposure scenarios implemented for this product.

#### Exposure limits

Occupational exposure limits have not been defined for the substances in this product.

#### Appropriate technical measures

Apply standard precautions during use of the product. Avoid inhalation of vapours.

#### Hygiene measures

Wash hands after use.

#### Measures to avoid environmental exposure

No specific requirements.


#### Individual protection measures, such as personal protective equipment

##### Generally

Use only protective equipment with a recognized certification mark, e.g. the UL mark.

##### Respiratory Equipment

Type	Class	Colour	Standards
Not required; except in case of aerosol formation.			N/A



##### Skin protection

No specific requirements.


##### Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.			



##### Eye protection

Type	Standards
Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).	EN166



## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

#### Physical state

Liquid

#### Color

No data available

#### Odor

No data available

#### Odor threshold (ppm)

No data available

#### pH

No data available

#### Density (g/cm<sup>3</sup>)

No data available

#### Relative density

No data available

Kinematic viscosity

No data available

Particle characteristics

No data available

#### Phase changes

Melting point/freezing point (°F)

No data available

Softening point/range (°F)

Does not apply to liquids.

Boiling point (°F)

No data available

Vapor pressure

No data available

Relative vapor density

No data available

Decomposition temperature (°F)

No data available

#### Data on fire and explosion hazards

Flash point (°F)

No data available

Flammability (°F)

No data available

Auto-ignition temperature (°F)

No data available

Explosion limits (% v/v)

No data available

#### Solubility

Solubility in water

Soluble

n-octanol/water coefficient (LogKow)

No data available

Solubility in fat (g/L)

No data available

#### 9.2. Other information

Evaporation rate (n-butylacetate = 100)

No data available

Other physical and chemical parameters

No data available.

Oxidizing properties

No data available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No data available.

#### 10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

#### 10.3. Possibility of hazardous reactions, including those associated with foreseeable emergencies

None known.

#### 10.4. Conditions to avoid

Heat, flames and sparks.

#### 10.5. Incompatible materials

No specific requirements

#### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

### SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity

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

#### Skin corrosion/irritation

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

#### Serious eye damage/irritation

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

#### Respiratory sensitisation

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

#### Skin sensitisation

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

#### Germ cell mutagenicity

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

#### Carcinogenicity

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

#### Reproductive toxicity

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

#### STOT-single exposure

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

#### STOT-repeated exposure

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

#### Aspiration hazard

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

#### Long term effects

None known.

#### Other information

None known.

## SECTION 12: Ecological information

### 12.1. Toxicity

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

### 12.2. Persistence and degradability

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

### 12.3. Bioaccumulative potential

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

### 12.4. Mobility in soil

No data available.

### 12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

### 12.6. Other adverse effects

None known.

## SECTION 13: Disposal considerations

### RCRA Hazardous waste ("P" and "U" list) (40 CFR 261)

None of the components are listed

### Specific labelling

### Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

## SECTION 14: Transport information

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
DOT	-	-	-	-	-	-

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Envv**	Other informatio n:
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

\* Packing group

\*\* Environmental hazards

#### Additional information

Not dangerous goods according to DOT, IATA and IMDG.

#### 14.6. Special precautions for user

Not applicable.

#### 14.7. Transport in bulk according to IMO instruments

No data available.

### SECTION 15: Regulatory information

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.2. U.S. Federal regulations

##### TSCA (the non-confidential portion)

None of the components are listed

##### Clean Air Act

None of the components are listed

##### EPCRA Section 302

None of the components are listed

##### EPCRA Section 304

None of the components are listed

##### EPCRA section 313

None of the components are listed

##### CERCLA

None of the components are listed

##### Hazardous chemical inventory reporting

This product is not subject to Tier II reporting.

#### State regulations

##### California / Prop. 65

None of the components are listed

##### Massachusetts / Right To Know Act

None of the components are listed

##### New Jersey / Right To Know Act

None of the components are listed

##### New York / Right To Know Act

None of the components are listed

##### Pennsylvania / Right To Know Act

None of the components are listed

#### 15.4. Restrictions for application

Restricted to professional users.

#### 15.5. Demands for specific education

No specific requirements.

#### 15.6. Additional information

Not applicable.

#### 15.7. Chemical safety assessment

No

#### 15.8. Sources

OSHA Hazard Communication Standard (29 CFR 1910.1200)

### SECTION 16: Other information

The full text of identified uses as mentioned in section 1

None known.

#### Abbreviations and acronyms

ACGIH = American Conference of Governmental Industrial Hygienists  
ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway  
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road  
ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
CAS = Chemical Abstracts Service  
CERCLA = Comprehensive Environmental Response Compensation and Liability Act  
DOT = Department of Transportation  
EINECS = European Inventory of Existing Commercial chemical Substances  
EPCRA = Emergency Planning and Community Right-To-Know Act  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
HCIS = Hazardous Chemical Information System  
HNOC = Hazards Not Otherwise Classified  
IARC = International Agency for Research on Cancer  
IATA = International Air Transport Association  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
NFPA = National Fire Protection Association  
NIOSH = National Institute for Occupational Safety and Health  
OECD = Organisation for Economic Co-operation and Development  
OSHA = Occupational Safety and Health Administration  
PBT = Persistent, Bioaccumulative and Toxic  
RCRA = Resource Conservation and Recovery Act  
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail  
RRN = REACH Registration Number  
SARA = Superfund Amendments and Reauthorization Act  
SCL = A specific concentration limit.  
STEL = Short-term exposure limits  
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure  
STOT-SE = Specific Target Organ Toxicity - Single Exposure  
TSCA = The Toxic Substances Control Act  
TWA = Time weighted average  
UN = United Nations  
UVBC = Unknown or variable composition, complex reaction products or of biological materials  
VOC = Volatile Organic Compound  
vPvB = Very Persistent and Very Bioaccumulative

#### Additional information

In accordance with HCS (29 CFR 1910.1200(g)), a safety data sheet is not required for this product. This safety data sheet has been created on a voluntary basis to distribute relevant information.

The information provided above is believed to be correct to our best knowledge, but does not purport to be all inclusive, and shall be used only as a guide. This material is sold for research purposes only and is not required to appear on the TSCA inventory. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals. Biotium shall not be held liable for any damage resulting from handling or contact with the above product.

#### The safety data sheet is validated by

Julianne Davis

#### Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: US-en



## SAFETY DATA SHEET

# DAB Substrate, 20X

### SECTION 1: Identification

#### 1.1. Product identifier

##### Trade name

DAB Substrate, 20X

##### Other names / Synonyms

30015A: DAB Substrate, 20X, 15 mL

##### Product no.

30015A

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

##### Relevant identified uses of the substance or mixture

Use as laboratory reagent. For research use only. Not for food, drug, household, or cosmetic use.  
Restricted to professional users.

##### Uses advised against

Use as laboratory reagent. For research use only. Not for food, drug, household, or cosmetic use.

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

##### Company and address

###### **Biotium, Inc.**

46117 Landing Parkway

CA 94538 Fremont

USA

T: +1 510-265-1027

Fax: +1 510-265-1352

<http://www.biotium.com>

##### E-mail

[techsupport@biotium.com](mailto:techsupport@biotium.com)

##### SDS date

4/29/2025

##### SDS Version

1.0

#### 1.4. Emergency telephone number

Contact the poison control at 1-800-222-1222 (24/7) or use the webPOISONCONTROL® ([triage.webpoisoncontrol.org](http://triage.webpoisoncontrol.org)) to get specific guidance for your case  
See also section 4 "First aid measures".

### SECTION 2: Hazard(s) identification

#### OSHA/HCS status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

#### 2.1. Classification of the substance or mixture

Muta. 2; H341, Suspected of causing genetic defects.

Carc. 1B; H350, May cause cancer.

#### 2.2. Label elements

##### Hazard pictogram(s)



##### Signal word

Danger

##### Hazard statement(s)

Suspected of causing genetic defects. (H341)

May cause cancer. (H350)

#### Precautionary statement(s)

##### General

-

##### Prevention

Obtain special instructions before use. (P201)

Wear eye protection/face protection/protective gloves. (P280)

##### Response

IF exposed or concerned: Get medical advice/attention. (P308+P313)

##### Storage

-

##### Disposal

Dispose of contents/container in accordance with local regulation (P501)

#### Additional labelling

Restricted to professional users.

### SECTION 3: Composition/Information on Ingredients

#### 3.1. Substances

Not applicable. This product is a mixture.

#### 3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Biphenyl-3,3',4,4'-tetrayltetraammonium tetrachloride	CAS No.: 7411-49-6	1%	Muta. 2, H341 Carc. 1B, H350	

Where the concentration of an ingredient is expressed as a range the exact concentration has been withheld as a trade secret.

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

#### Other information

-

No ingredients present at concentrations classified as harmful to health or the environment.

### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

##### General information

If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 911 and give immediate treatment (first aid).

Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

##### Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

##### Skin contact

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

##### Eye contact

If in eyes: Flush eyes with water or saline water (20-30 °C) for at least 5 minutes. Remove contact lenses. Seek medical assistance and continue flushing during transport.

##### Ingestion

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.

In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

#### Burns

Not applicable.

#### 4.2. Most important symptoms and effects, both acute and delayed

None known.

#### 4.3. Indication of any immediate medical attention and special treatment needed

IF exposed or concerned:

Get immediate medical advice/attention.

#### Information to medics

Bring this safety data sheet or the label from this product.

### SECTION 5: Fire-fighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

#### 5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

#### 5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact the Poison Help Line on 1-800-222-1222 (24/7) in order to obtain further advice.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

Avoid direct contact with spilled substances.

Contaminated areas may be slippery.

#### 6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.

#### 6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

#### 6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Avoid direct contact with the product.

Avoid contact during pregnancy and while nursing.

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

#### 7.2. Conditions for safe storage, including any incompatibilities

Store locked up. A sign warning of toxic materials shall be affixed the room and cupboard containing the product(s). Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

##### Recommended storage material

Always store in containers of the same material as the original container.

##### Storage conditions

Refrigerator 2°C to 8°C.

Protect from light.

Keep container tightly closed in a dry and well-ventilated place.

##### Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

### 7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No substances are listed with a permissible exposure limit (ref: 29 CFR 1910.1000 TABLE Z-1)

### 8.2. Exposure controls

Apply general control to prevent unnecessary exposure

#### General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

#### Exposure scenarios

There are no exposure scenarios implemented for this product.

#### Exposure limits

Occupational exposure limits have not been defined for the substances in this product.

#### Appropriate technical measures

Do not recirculate outlet air that contain the substances.

Apply standard precautions during use of the product. Avoid inhalation of vapours.

#### Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Pay special attention to hands, forearms and face.

#### Measures to avoid environmental exposure

Keep damming materials near the workplace. If possible, collect spillage during work.

### Individual protection measures, such as personal protective equipment

#### Generally

Use only protective equipment with a recognized certification mark, e.g. the UL mark.

#### Respiratory Equipment

Type	Class	Colour	Standards
Not required; except in case of aerosol formation.			N/A



#### Skin protection

No specific requirements.

#### Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
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Handle with gloves.  
Gloves must be inspected prior to use.  
Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product.  
Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.



#### Eye protection

Type	Standards
Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under	EN166



Type	Standards
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appropriate government standards such as NIOSH (US) or EN 166(EU).	
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## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

#### Physical state

Liquid

#### Color

No data available.

#### Odor

No data available.

#### Odor threshold (ppm)

No data available.

#### pH

No data available.

#### Density (g/cm<sup>3</sup>)

No data available.

#### Kinematic viscosity

No data available.

#### Particle characteristics

Does not apply to liquids.

#### Phase changes

##### Melting point/freezing point (°F)

No data available.

##### Softening point/range (°F)

Does not apply to liquids.

##### Boiling point (°F)

No data available.

##### Vapor pressure

No data available.

##### Relative vapor density

No data available.

##### Decomposition temperature (°F)

No data available.

#### Data on fire and explosion hazards

##### Flash point (°F)

No data available.

##### Flammability (°F)

No data available.

##### Auto-ignition temperature (°F)

No data available.

##### Explosion limits (% v/v)

No data available.

#### Solubility

##### Solubility in water

No data available.

##### n-octanol/water coefficient (LogKow)

No data available.

##### Solubility in fat (g/L)

No data available.

### 9.2. Other information

#### Other physical and chemical parameters

No data available.

#### Oxidizing properties

No data available.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No data available.

### 10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

### 10.3. Possibility of hazardous reactions, including those associated with foreseeable emergencies

None known.

### 10.4. Conditions to avoid

Heat, flames and sparks.

### 10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity

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

#### Skin corrosion/irritation

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

#### Serious eye damage/irritation

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

#### Respiratory sensitisation

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

#### Skin sensitisation

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

#### Germ cell mutagenicity

Suspected of causing genetic defects.

#### Carcinogenicity

May cause cancer.

#### Reproductive toxicity

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

#### STOT-single exposure

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

#### STOT-repeated exposure

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

#### Aspiration hazard

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

#### Long term effects

Carcinogenic effects: This product contains substances considered or proven to be carcinogenic. The carcinogenic effects may be triggered subsequent to exposure through inhalation, skin contact or ingestion.

#### Other information

None known.

## SECTION 12: Ecological information

### 12.1. Toxicity

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

### 12.2. Persistence and degradability

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

### 12.3. Bioaccumulative potential

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

### 12.4. Mobility in soil

No data available.

### 12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

#### 12.6. Other adverse effects

None known.

### SECTION 13: Disposal considerations

#### RCRA Hazardous waste ("P" and "U" list) (40 CFR 261)

None of the components are listed

#### Specific labelling

#### Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

### SECTION 14: Transport information

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
DOT	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

\* Packing group

\*\* Environmental hazards

#### Additional information

Not dangerous goods according to DOT, IATA and IMDG.

#### 14.6. Special precautions for user

Not applicable.

#### 14.7. Transport in bulk according to IMO instruments

No data available.

### SECTION 15: Regulatory information

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.2. U.S. Federal regulations

##### TSCA (the non-confidential portion)

Biphenyl-3,3',4,4'-tetrayltetraammonium tetrachloride is listed

##### Clean Air Act

None of the components are listed

##### EPCRA Section 302

None of the components are listed

##### EPCRA Section 304

None of the components are listed

##### EPCRA section 313

None of the components are listed

##### CERCLA

None of the components are listed

##### Hazardous chemical inventory reporting

This product is subject to Tier II reporting.

#### State regulations

##### California / Prop. 65

None of the components are listed

##### Massachusetts / Right To Know Act

None of the components are listed

##### New Jersey / Right To Know Act

None of the components are listed

##### New York / Right To Know Act

None of the components are listed

#### Pennsylvania / Right To Know Act

None of the components are listed

#### 15.4. Restrictions for application

Restricted to professional users.

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

#### 15.5. Demands for specific education

No specific requirements.

#### 15.6. Additional information

Not applicable.

#### 15.7. Chemical safety assessment

No

#### 15.8. Sources

OSHA Hazard Communication Standard (29 CFR 1910.1200)

### SECTION 16: Other information

#### Full text of H-phrases as mentioned in section 3

H341, Suspected of causing genetic defects.

H350, May cause cancer.

#### The full text of identified uses as mentioned in section 1

None known.

#### Abbreviations and acronyms

ACGIH = American Conference of Governmental Industrial Hygienists

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CERCLA = Comprehensive Environmental Response Compensation and Liability Act

DOT = Department of Transportation

EINECS = European Inventory of Existing Commercial chemical Substances

EPCRA = Emergency Planning and Community Right-To-Know Act

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

HCIS = Hazardous Chemical Information System

HNOC = Hazards Not Otherwise Classified

IARC = International Agency for Research on Cancer

IATA = International Air Transport Association

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

NFPA = National Fire Protection Association

NIOSH = National Institute for Occupational Safety and Health

OECD = Organisation for Economic Co-operation and Development

OSHA = Occupational Safety and Health Administration

PBT = Persistent, Bioaccumulative and Toxic

RCRA = Resource Conservation and Recovery Act

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

RRN = REACH Registration Number

SARA = Superfund Amendments and Reauthorization Act

SCL = A specific concentration limit.

STEL = Short-term exposure limits

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure

TSCA = The Toxic Substances Control Act

TWA = Time weighted average

UN = United Nations

UVBC = Unknown or variable composition, complex reaction products or of biological materials

VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bioaccumulative

#### Additional information



The classification of the mixture in regard of health hazards is in accordance with the calculation methods given by HCS (29 CFR 1910.1200).

The information provided above is believed to be correct to our best knowledge, but does not purport to be all inclusive, and shall be used only as a guide. This material is sold for research purposes only and is not required to appear on the TSCA inventory. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals. Biotium shall not be held liable for any damage resulting from handling or contact with the above product.

[The safety data sheet is validated by](#)

Julianne Davis

#### Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: US-en

## SAFETY DATA SHEET

## Stabilized Peroxide Buffer, 20X

## SECTION 1: Identification

## 1.1. Product identifier

## Trade name

Stabilized Peroxide Buffer, 20X

## Other names / Synonyms

30015B: Stabilized Peroxide Buffer, 20X, 15 mL

## Product no.

30015B

## 1.2. Relevant identified uses of the substance or mixture and uses advised against

## Relevant identified uses of the substance or mixture

Use as laboratory reagent. For research use only. Not for food, drug, household, or cosmetic use.  
Restricted to professional users.

## Uses advised against

Use as laboratory reagent. For research use only. Not for food, drug, household, or cosmetic use.

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

## Company and address

**Biotium, Inc.**

46117 Landing Parkway

CA 94538 Fremont

USA

T: +1 510-265-1027

Fax: +1 510-265-1352

<http://www.biotium.com>

## E-mail

[techsupport@biotium.com](mailto:techsupport@biotium.com)

## SDS date

4/29/2025

## SDS Version

1.0

## 1.4. Emergency telephone number

Contact the poison control at 1-800-222-1222 (24/7) or use the webPOISONCONTROL® ([triage.webpoisoncontrol.org](http://triage.webpoisoncontrol.org)) to get specific guidance for your case  
See also section 4 "First aid measures".

## SECTION 2: Hazard(s) identification

## 2.1. Classification of the substance or mixture

Not classified according to HCS (29 CFR 1910.1200)

## 2.2. Label elements

## Hazard pictogram(s)

Not applicable.

## Signal word

Not applicable.

## Hazard statement(s)

## Precautionary statement(s)

## General

-

## Prevention

-

## Response

-  
Storage

-  
Disposal

-  
Additional labelling  
Not applicable.

## SECTION 3: Composition/Information on Ingredients

### 3.1. Substances

Not applicable. This product is a mixture.

### 3.2. Mixtures

Does not contain any substances required to report

Where the concentration of an ingredient is expressed as a range the exact concentration has been withheld as a trade secret.

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

### Other information

-  
No ingredients present at concentrations classified as harmful to health or the environment.

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

#### General information

If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 911 and give immediate treatment (first aid).

Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

#### Inhalation

In case of discomfort: bring the person into fresh air.

#### Skin contact

Upon irritation: rinse with water. In the event of continued irritation, seek medical assistance.

#### Eye contact

Rinse gently with lukewarm water. Remove any contact lenses if this is easy to do. Continue rinsing. In case of persistent eye irritation or discomfort: Seek medical help.

#### Ingestion

Rinse and flush mouth thoroughly and consume large quantities of water. In case of continued discomfort: seek medical assistance and bring this safety data sheet.

#### Burns

Not applicable.

### 4.2. Most important symptoms and effects, both acute and delayed

None known.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

### Information to medics

Bring this safety data sheet or the label from this product.

## SECTION 5: Fire-fighting measures

### 5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

### 5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and

nearby surface waters.

### 5.3. Advice for firefighters

No specific requirements.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation, especially in confined areas.

Contaminated areas may be slippery.

### 6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

Keep unauthorized persons away from the spill

### 6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

### 6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

### 7.2. Conditions for safe storage, including any incompatibilities

#### Recommended storage material

Always store in containers of the same material as the original container.

#### Storage conditions

Refrigerator 2°C to 8°C.

Keep container tightly closed in a dry and well-ventilated place.

#### Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

### 7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

hydrogen peroxide solution ...%

Long term exposure limit (OSHA Table Z-1) (mg/m<sup>3</sup>): 1.4

Long term exposure limit (OSHA Table Z-1) (ppm): 1

Long term exposure limit (ACGIH TLV) (ppm): 1

Part 1910 - Occupational Safety and Health Standards (29 CFR 1910.1000 TABLE Z-1 - Limits for Air Contaminants)

### 8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

#### General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

#### Exposure scenarios

There are no exposure scenarios implemented for this product.

#### Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

#### Appropriate technical measures

The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked.

Apply standard precautions during use of the product. Avoid inhalation of vapours.

### Hygiene measures

Wash hands after use.

### Measures to avoid environmental exposure

No specific requirements.


### Individual protection measures, such as personal protective equipment

#### Generally

Use only protective equipment with a recognized certification mark, e.g. the UL mark.

#### Respiratory Equipment

Type	Class	Colour	Standards
Not required; except in case of aerosol formation.			N/A



#### Skin protection

No specific requirements.


#### Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.			



#### Eye protection

Type	Standards
Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).	EN166



## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

#### Physical state

Liquid

#### Color

No data available.

#### Odor

No data available.

#### Odor threshold (ppm)

No data available.

#### pH

No data available.

#### Density (g/cm<sup>3</sup>)

No data available.

**Kinematic viscosity**

No data available.

**Particle characteristics**

Does not apply to liquids.

**Phase changes****Melting point/freezing point (°F)**

No data available.

**Softening point/range (°F)**

Does not apply to liquids.

**Boiling point (°F)**

No data available.

**Vapor pressure**

No data available.

**Relative vapor density**

No data available.

**Decomposition temperature (°F)**

No data available.

**Data on fire and explosion hazards****Flash point (°F)**

No data available.

**Flammability (°F)**

No data available.

**Auto-ignition temperature (°F)**

No data available.

**Explosion limits (% v/v)**

No data available.

**Solubility****Solubility in water**

No data available.

**n-octanol/water coefficient (LogKow)**

No data available.

**Solubility in fat (g/L)**

No data available.

**9.2. Other information****Other physical and chemical parameters**

No data available.

**Oxidizing properties**

No data available.

**SECTION 10: Stability and reactivity****10.1. Reactivity**

No data available.

**10.2. Chemical stability**

The product is stable under the conditions, noted in section 7 "Handling and storage".

**10.3. Possibility of hazardous reactions, including those associated with foreseeable emergencies**

None known.

**10.4. Conditions to avoid**

Heat, flames and sparks.

**10.5. Incompatible materials**

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

**10.6. Hazardous decomposition products**

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Acute toxicity**

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

#### Skin corrosion/irritation

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

#### Serious eye damage/irritation

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

#### Respiratory sensitisation

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

#### Skin sensitisation

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

#### Germ cell mutagenicity

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

#### Carcinogenicity

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

#### Reproductive toxicity

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

#### STOT-single exposure

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

#### STOT-repeated exposure

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

#### Aspiration hazard

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

#### Long term effects

None known.

#### Other information

hydrogen peroxide solution ...% has been classified by IARC as a group 3 carcinogen.

### SECTION 12: Ecological information

#### 12.1. Toxicity

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

#### 12.2. Persistence and degradability

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

#### 12.3. Bioaccumulative potential

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

#### 12.4. Mobility in soil

No data available.

#### 12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

#### 12.6. Other adverse effects

None known.

### SECTION 13: Disposal considerations

#### RCRA Hazardous waste ("P" and "U" list) (40 CFR 261)

None of the components are listed

#### Specific labelling

#### Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

### SECTION 14: Transport information

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
DOT	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

\* Packing group

\*\* Environmental hazards

[Additional information](#)

Not dangerous goods according to DOT, IATA and IMDG.

[14.6. Special precautions for user](#)

Not applicable.

[14.7. Transport in bulk according to IMO instruments](#)

No data available.

## SECTION 15: Regulatory information

[15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture](#)

[15.2. U.S. Federal regulations](#)

[TSCA \(the non-confidential portion\)](#)

hydrogen peroxide solution ...% is listed

[Clean Air Act](#)

None of the components are listed

[EPCRA Section 302](#)

hydrogen peroxide solution ...% is regulated with a Treshold Planning Quantity (TPQ) of: 1000 pounds

[EPCRA Section 304](#)

hydrogen peroxide solution ...% is regulated with a Reportable Quantity (RQ) of: 1000 pounds

[EPCRA section 313](#)

None of the components are listed

[CERCLA](#)

None of the components are listed

[Hazardous chemical inventory reporting](#)

This product is not subject to Tier II reporting.

[State regulations](#)

[California / Prop. 65](#)

None of the components are listed

[Massachusetts / Right To Know Act](#)

hydrogen peroxide solution ...% is listed

[New Jersey / Right To Know Act](#)

hydrogen peroxide solution ...% / Substance number: 1015

hydrogen peroxide solution ...% is on the Special Health Hazard Substance List

[New York / Right To Know Act](#)

hydrogen peroxide solution ...% is listed

hydrogen peroxide solution ...% is regulated with a Reportable Quantity (RQ) of: 1 pounds

hydrogen peroxide solution ...% is regulated with a Treshold Reporting Quantity (TRQ) of: 0 pounds

hydrogen peroxide solution ...% is regulated with a Treshold Planning Quantity (TPQ) of: 1000 pounds

[Pennsylvania / Right To Know Act](#)

hydrogen peroxide solution ...% is listed

hydrogen peroxide solution ...% is hazardous to the environment (E)

[15.4. Restrictions for application](#)

Restricted to professional users.

[15.5. Demands for specific education](#)

No specific requirements.

[15.6. Additional information](#)

Not applicable.

[15.7. Chemical safety assessment](#)

No

[15.8. Sources](#)

OSHA Hazard Communication Standard (29 CFR 1910.1200)

## SECTION 16: Other information



#### The full text of identified uses as mentioned in section 1

None known.

#### Abbreviations and acronyms

ACGIH = American Conference of Governmental Industrial Hygienists  
ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway  
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road  
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LogPow = logarithm of the octanol/water partition coefficient  
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
NFPA = National Fire Protection Association  
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PBT = Persistent, Bioaccumulative and Toxic  
RCRA = Resource Conservation and Recovery Act  
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail  
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SARA = Superfund Amendments and Reauthorization Act  
SCL = A specific concentration limit.  
STEL = Short-term exposure limits  
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure  
STOT-SE = Specific Target Organ Toxicity - Single Exposure  
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UN = United Nations  
UVBC = Unknown or variable composition, complex reaction products or of biological materials  
VOC = Volatile Organic Compound  
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#### Additional information

Not applicable.

The information provided above is believed to be correct to our best knowledge, but does not purport to be all inclusive, and shall be used only as a guide. This material is sold for research purposes only and is not required to appear on the TSCA inventory. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals. Biotium shall not be held liable for any damage resulting from handling or contact with the above product.

#### The safety data sheet is validated by

Julianne Davis

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