

## SAFETY DATA SHEET

## LipidSpot™ Lipid Droplet Stains

## SECTION 1: Identification

## 1.1. Product identifier

## Trade name

LipidSpot™ Lipid Droplet Stains

## Other names / Synonyms

70065-T: LipidSpot™ 488 Lipid Droplet Stain, 20 uL

70065: LipidSpot™ 488 Lipid Droplet Stain, 125 uL

70069-T: LipidSpot 610 Lipid Droplet Stain, 20 uL

70069: LipidSpot 610 Lipid Droplet Stain, 125 uL

## Product no.

70065-T, 70065, 70069-T, 70069

## Other means of identification

CAS No.: 67-68-5

## 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

None known.

## 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

5/8/2024

## 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.

#### 2.3. Other hazards

##### Additional warnings

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

### SECTION 3: Composition/Information on Ingredients

#### 3.1. Substances

Does not contain any substances required to report

#### 3.2. Mixtures

Not applicable. This product is a substance.

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

-

### 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

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

#### 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.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Sulphur oxides

Carbon oxides (CO / CO<sub>2</sub>)

#### 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.

Fire fighters should wear appropriate personal protective equipment.

### 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

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

##### Recommended storage material

No specific requirements

##### Storage temperature

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

Protect from light.

Refrigerator 2°C to 8°C.

##### 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

Recommended	Type/Category	Standards
n/a	n/a	n/a


### 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

#### Colour

No data available

#### Odour

No data available

#### Odour 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 (°F)

No data available

##### Softening point/range (waxes and pastes) (°F)

Does not apply to liquids.

##### Boiling point (°F)

No data available

##### Vapour pressure

No data available

##### Relative vapour 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

None known.

### 10.4. Conditions to avoid

Do not expose to any forms of heat (e.g. solar radiation). May lead to excess pressure. Heat, flames and sparks.

### 10.5. Incompatible materials

No specific requirements

### 10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity

Product/substance	Dimethyl sulfoxide
Test method:	OECD 401
Species:	Rat, male/female
Route of exposure:	Oral
Test:	LD50
Result:	28,300 mg/kg

Product/substance	Dimethyl sulfoxide
Test method:	OECD 403
Species:	Rat, male/female
Route of exposure:	Inhalation
Test:	LC50
Result:	4h - > 5.33 mg/L

Product/substance	Dimethyl sulfoxide
Species:	Rat, male/female
Route of exposure:	Dermal
Test:	LD50
Result:	40,000 mg/kg

#### Skin corrosion/irritation

Product/substance	Dimethyl sulfoxide
Test method:	OECD 404
Species:	Rabbit
Description:	Slight irritation 4 h

#### Serious eye damage/irritation

Product/substance	Dimethyl sulfoxide
Test method:	OECD 405
Species:	Rabbit
Description:	Slight irritation - 24 h

#### Respiratory sensitisation

Product/substance	Dimethyl sulfoxide
Test method:	OECD 406
Species:	Guinea pig
Description:	Negative

Product/substance	Dimethyl sulfoxide
Test method:	OECD 429
Species:	Mouse

Description: Negative

#### Skin sensitisation

Product/substance: Dimethyl sulfoxide  
 Test method: OECD 406  
 Species: Guinea pig  
 Description: Negative

Product/substance: Dimethyl sulfoxide  
 Test method: OECD 429  
 Species: Mouse  
 Description: Negative

#### Germ cell mutagenicity

Product/substance: Dimethyl sulfoxide  
 Test method: OECD 471  
 Species: S. typhimurium  
 Description: Negative

Product/substance: Dimethyl sulfoxide  
 Test method: OECD Test Guideline 479  
 Species: Chinese Hamster Ovary (CHO)  
 Description: Negative

Product/substance: Dimethyl sulfoxide  
 Test method: OECD 473  
 Species: Chinese Hamster Ovary (CHO)  
 Description: Negative

Product/substance: Dimethyl sulfoxide  
 Test method: OECD 474  
 Species: Rat  
 Description: Negative

#### 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

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

#### Other information

None known.

## SECTION 12: Ecological information

### 12.1. Toxicity

Product/substance: Dimethyl sulfoxide  
 Test method: OECD 203  
 Species: Fish, Danio rerio  
 Duration: 96 hours  
 Test: LC50  
 Result: 25,000 mg/L

Product/substance: Dimethyl sulfoxide  
 Test method: OECD 202  
 Species: Daphnia  
 Duration: 48 hours  
 Test: EC50  
 Result: 24,600 mg/L

Product/substance: Dimethyl sulfoxide  
 Test method: OECD 201  
 Species: Algae, Pseudokirchneriella subcapitata  
 Duration: 72 hours  
 Test: ErC50  
 Result: 17,000 mg/L

Product/substance: Dimethyl sulfoxide  
 Test method: ISO 8192  
 Species: Bacteria  
 Compartment: Activated Sludge Plant  
 Duration: 30 min.  
 Test: EC50  
 Result: 10 - 100 mg/L

### 12.2. Persistence and degradability

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

### 12.3. Bioaccumulative potential

Product/substance: Dimethyl sulfoxide  
 Conclusion: Potential for bioaccumulation  
 Test: OECD Test Guideline 301D

### 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

This product contains substances with the potential of bioaccumulation resulting in the risk of accumulation in the food chain. Bioaccumulative substances are concentrated in adipose tissue and are not easily secreted.

## 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 Annex II of Marpol and the IBC Code  
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)  
Dimethyl sulfoxide 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
- 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  
Dimethyl sulfoxide / Substance number: 4145  
Dimethyl sulfoxide is on the Special Health Hazard Substance List
  - 
  - 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

- 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