



# Safety Data Sheet

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### Identification of the substance or mixture

**Product code** LiT-MTT-AK-ComponentA-5mg  
**Product name** Component A

### Company/undertaking identification

LiT Biosciences, LLC  
120 N Pine St, Suite 242  
Spokane, WA 99202  
USA

(509) 496-7158

**24 hour Emergency Response for Hazardous Materials  
[or Dangerous Goods] Incident. Spill, Leak, Fire,  
Exposure, or Accident. Call CHEMTREC**

Within the USA + Canada: 1-800-424-9300 and  
1-703-527-3887

**Country Specific Emergency Number (if available):** Outside the USA + Canada: 1-703-741-5970

**For research use only. Not for use in diagnostic procedures**

## Section 2: HAZARDS IDENTIFICATION

### GHS Classification

**Signal Word**  
WARNING

### Hazard pictograms



**Revision date** 07-Nov-2025  
**Product code** LiT-MTT-AK-ComponentA-5mg

**Page** 1 / 10

## Health hazards

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Specific target organ toxicity (STOT) – single exposure	Category 3
Germ cell mutagenicity	Mutagenic category 2

## Physical hazards

Not Hazardous

## Environmental hazards

Not Hazardous

## Hazard Statements

H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H335 - May cause respiratory irritation  
H341 - Suspected of causing genetic defects

## Precautionary Statements

### Prevention

P201 - Obtain special instructions before use  
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray  
P264 - Wash hands thoroughly after handling  
P271 - Use only outdoors or in a well-ventilated area  
P280 - Wear protective gloves/protective clothing/eye protection/face protection

### Response

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
DO NOT USE: P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
P312 - Call a POISON CENTER or doctor/physician if you feel unwell  
P362 + P364 - Take off contaminated clothing and wash it before reuse

### Storage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

### Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

## Other hazards

Not Applicable

## HMIS

Health	4 * Chronic Hazard
Flammability	0
Reactivity	0

### Section 3: Composition/information on ingredients

Chemical Name	CAS No.	Common name	EC No.	Weight-%
MTT; 2-(4,5-Dimethylthiazol-2-yl)-3,5-diphenyl-2H-tetrazol-3-ium bromide	298-93-1	Not applicable	206-069-5	95-100

We recommend handling all chemicals with caution.

### Section 4: First aid measures

#### Description of first aid measures

<b>Skin contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Immediate medical attention is required.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
<b>Ingestion</b>	Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. Get medical attention if symptoms occur.
<b>Inhalation</b>	Remove to fresh air. If not breathing, give artificial respiration. If symptoms persist, call a physician.
<b>Notes to Physician</b>	Treat symptomatically.

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

H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation H341 - Suspected of causing genetic defects

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

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF exposed or concerned: Get medical advice/attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing.

### Section 5: Firefighting measures

#### Extinguishing media

<b>Suitable extinguishing media</b>	Water spray. Carbon dioxide (CO <sub>2</sub> ). Foam. Dry chemical.
<b>Unsuitable extinguishing media</b>	No information available.

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

No data

<b>Hazardous Combustion Products</b>	No known hazardous decomposition products.
--------------------------------------	--

#### Advice for firefighters

Wear self-contained breathing apparatus and protective suit.

## Section 6: ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation  
Avoid contact with skin, eyes or clothing  
Use personal protection equipment  
See section 8 for more information

### Environmental precautions

Avoid release to the environment.

### Methods and material for containment and cleaning up

Take up mechanically, placing in appropriate containers for disposal.

### Reference to other sections

See section 8 for more information.

## Section 7: Handling and storage

### Precautions for safe handling

Always wear recommended Personal Protective Equipment. See section 8 for more information. Do not get in eyes, on skin, or on clothing. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator.

### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep in properly labeled containers. Store in accordance with local regulations.

### Storage Conditions

Cold Room (2 °C to 8 °C) CR in Dark/Protect from Light

### Specific end use(s)

For research use only.

## SECTION 8: Exposure controls/personal protection

### Control parameters

Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
MTT; 2-(4,5-Dimethylthiazol-2-yl)-3,5-diphenyl-2H-tetrazol-3-ium bromide	None	None	None	None

Chemical Name	Brazil - OEL - TWAs (LTs)	Brazil - OEL - Ceilings	Brazil - OEL - Skin Designations
MTT; 2-(4,5-Dimethylthiazol-2-yl)-3,5-diphenyl-2H-tetrazol-3-ium bromide	None	None	None

### Engineering Measures

Ensure adequate ventilation, especially in confined areas.

## **Exposure controls**

### **Personal Protective Equipment**

**Respiratory protection** In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards.

**Hand protection** Wear suitable gloves. Glove material: Compatible chemical-resistant gloves.

**Eye protection** Tight sealing safety goggles.

**Skin and Body Protection** Wear laboratory coat for body protection.

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

### **Environmental exposure controls**

Avoid release to the environment.

## Section 9: Physical and chemical properties

### Information on basic physical and chemical properties

<b>Physical state</b>	Solid	
<b>Color</b>	yellow	
<b>Odor</b>	odorless	
<b>Molecular Weight</b>	No data	
<b>Melting point / melting range</b>	°C 195	°F 383
<b>Boiling point / boiling range</b>	°C No data	°F No data
<b>Flammability (solid, gas)</b>	No data	
<b>Lower explosion limit</b>	No data	
<b>Upper explosion limit</b>	No data	
<b>Flash point</b>	°C No data	°F No data
<b>Autoignition Temperature</b>	°C No data	°F No data
<b>Decomposition temperature</b>	°C No data	°F No data
<b>Evaporation rate</b>	No data	
<b>Viscosity</b>	No data	
<b>Solubility</b>	No data	
<b>Partition coefficient: n-octanol/water</b>	No data	
<b>Vapor Pressure</b>	No data	
<b>Specific gravity</b>	No data	
<b>Relative density</b>	No data	
<b>Vapor density</b>	No data	
<b>Explosive properties</b>	No data	
<b>Oxidizing properties</b>	No data	
<b>Particle characteristics</b>	No data	

### Other information

#### Information with regard to physical hazard classes

No information available

#### Other safety characteristics

No information available

## Section 10: Stability and reactivity

<b>Reactivity</b>	None known.
<b>Chemical stability</b>	Stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous reaction has not been reported.
<b>Conditions to avoid</b>	No information available.
<b>Incompatible materials</b>	No dangerous reaction known under conditions of normal use.
<b>Hazardous decomposition products</b>	No known hazardous decomposition products.

## Information on toxicological effects

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
MTT; 2-(4,5-Dimethylthiazol-2-yl)-3,5-diphenyl-2H-tetrazol-3-ium bromide	No data available	No data available	No data available

## Principal Routes of Exposure

<b>Acute toxicity</b>	Data are conclusive but insufficient for classification.
<b>Skin corrosion/irritation</b>	Skin irritation
<b>Serious eye damage/irritation</b>	Causes serious eye irritation
<b>Respiratory or skin sensitization</b>	Data are conclusive but insufficient for classification
<b>Specific target organ toxicity (STOT) – single exposure</b>	May cause respiratory irritation
<b>Specific target organ toxicity (STOT) – repeated exposure</b>	Data are conclusive but insufficient for classification
<b>Carcinogenicity</b>	Data are conclusive but insufficient for classification
<b>Germ cell mutagenicity</b>	Product is or contains a chemical which may cause mutations in the germ cells of humans.
<b>Reproductive toxicity</b>	Data are conclusive but insufficient for classification
<b>Aspiration hazard</b>	Data are conclusive but insufficient for classification

## Section 12: Ecological information

### Toxicity

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

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates	Toxicity to fish	Microtox Data	log Pow
MTT; 2-(4,5-Dimethylthiazol-2-yl)-3,5-diphenyl-2H-tetrazol-3-ium bromide	No data available	No data available	No data available	No data available	No data available

**Mobility in soil** No information available.

**Persistence and degradability** No information available.

**Bioaccumulative potential** No information available.

### Results of PBT and vPvB assessment

No information available.

**Other adverse effects** No information available.

## Section 13: Disposal considerations

### Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in according to approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

## Section 14: Transport information

### IATA / ADR / DOT-US / IMDG

Not regulated in the meaning of transport regulations

<b>UN number or ID number</b>	Not Applicable
<b>UN proper shipping name</b>	Not Applicable
<b>Transport hazard class(es)</b>	Not Applicable
<b>Packing group</b>	Not Applicable

### Environmental hazards

Not Applicable

### Special precautions for user

Not Applicable

### Maritime transport in bulk according to IMO instruments

Revision date 07-Nov-2025  
Product code LIT-MTT-AK-ComponentA-5mg

Page 8 / 10

Not Applicable.

### Section 15: Regulatory information

Component	US TSCA
MTT; 2-(4,5-Dimethylthiazol-2-yl)-3,5-diphenyl-2H-tetrazol-3-ium bromide 298-93-1 ( 95-100 )	Listed

### US Federal Regulations

#### **SARA 313**

This product is not regulated by SARA.

#### **Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product does not contain HAPs

### US State Regulations

#### **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

#### **WHMIS Hazard Class**

D2A - Very toxic materials

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

### National Regulations - Brazil

Chemical Name	CAS No.	Brazil - National Agency for Sanitary Surveillance (ANVISA)	Brazil - National List of Carcinogen Agents to Humans (LINACH)
MTT; 2-(4,5-Dimethylthiazol-2-yl)-3,5-diphenyl-2H-tetrazol-3-ium bromide	298-93-1	Not Listed	Not Listed

### Section 16: Other information

**Reason for revision** SDS sections updated.  
**Revision number** 4  
**Revision date** 29-May-2024

For research use only. Not for use in diagnostic procedures.

**Revision date** 07-Nov-2025  
**Product code** LIT-MTT-AK-ComponentA-5mg

Page 9 / 10

## **References**

- ECHA: <http://echa.europa.eu/>
- TOXNET: <http://toxnet.nlm.nih.gov/>
- eChemPortal: <http://www.echemportal.org/>
- LOLI database: <https://www.chemadvisor.com/loli-database>

## **Abbreviations and acronyms**

**TWA** - Time-Weighted Average

**OELs** - Occupational Exposure Limits

**STEL** - Short Term Exposure Limit

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

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

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

**IECSC** - China Inventory of Existing Chemical Substances

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

**AICS** - Australian Inventory of Chemical Substances

**NZIoC** - New Zealand Inventory of Chemicals

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

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**CEPA** - Canadian Environmental Protection Act

**EPA** - Environmental Protection Agency

**OSHA** - Occupational Safety and Health Administration of the US Department of Labor

**IATA** - International Air Transport Association

**DOT** - Department of Transportation

**IMDG** - International Maritime Dangerous Goods

**ACGIH** - American Conference of Governmental Industrial Hygienists

**NIOSH** - National Institute for Occupational Safety and Health

**AIHA** - American Industrial Hygiene Association

**HMIS** - Department of Defense Hazardous Materials Information System

**NTP** - National Toxicology Program

**IARC** - International Agency for Research on Cancer

"The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE"

**End of Safety Data Sheet**