

## Safety Data Sheet acc. to OSHA HCS

Printing date 08/24/2018

Reviewed on 03/31/2018

### 1 Identification

- **Product identifier**
- **Trade name: Isobutyl thiazole natural 1% WS**
- **Product number:** 1393
- **Application of the substance / the mixture** Food flavorings

- **Details of the supplier of the safety data sheet**

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- **Manufacturer/Supplier:**

Advanced Biotech  
 10 Taft Road  
 Totowa, NJ 07512 USA

- **Information department:**

Product Safety Department  
 productsafety@adv-bio.com

- **Emergency telephone number:**

1(800)535-5053 (Info Trac)  
 1(352)323-3500 (International)  
 During normal business hours: 1(973)339-6242

### 2 Hazard(s) identification

- **Classification of the substance or mixture**

The product is not classified, according to the Globally Harmonized System (GHS).

- **Label elements**

- **GHS label elements**

Pictograms on label shall be in the shape of a square set at a point and shall include a black hazard symbol on a white background with a red frame sufficiently wide to be clearly visible.

- **Hazard pictograms** Not Applicable

- **Signal word** Not Applicable

- **Hazard statements** Not Applicable

- **Classification system:**

- **NFPA ratings (scale 0 - 4)**



Health = 0  
 Fire = 1  
 Reactivity = 0

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· **HMIS-ratings (scale 0 - 4)**

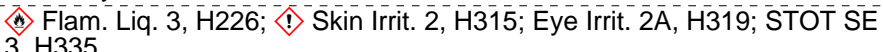
|            |   |                |
|------------|---|----------------|
| HEALTH     | 0 | Health = 0     |
| FIRE       | 1 | Fire = 1       |
| REACTIVITY | 0 | Reactivity = 0 |

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

- **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

|                 |  |       |
|-----------------|--|-------|
| CAS: 57-55-6    | Propylene glycol   | 99.0% |
| CAS: 18640-74-9 | 2-Isobutyl Thiazole<br> | 1.0%  |

### 4 First-aid measures

- **Description of first aid measures**
- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed**  
 No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
 No further relevant information available.

### 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
 CO<sub>2</sub>, powder or alcoholresistant foam.  
 CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.  
 Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.
- **Additional information**  
 Cool endangered receptacles with water spray.

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Collect contaminated fire fighting water separately. It must not enter the sewage system.

**6 Accidental release measures**

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Dilute with plenty of water.
- **Methods and material for containment and cleaning up:**  
 Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **Reference to other sections**  
 See Section 7 for information on safe handling.  
 See Section 8 for information on personal protection equipment.  
 See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

· **PAC-1:**

|              |                  |                      |
|--------------|------------------|----------------------|
| CAS: 57-55-6 | Propylene glycol | 30 mg/m <sup>3</sup> |
|--------------|------------------|----------------------|

· **PAC-2:**

|              |                  |                         |
|--------------|------------------|-------------------------|
| CAS: 57-55-6 | Propylene glycol | 1,300 mg/m <sup>3</sup> |
|--------------|------------------|-------------------------|

· **PAC-3:**

|              |                  |                         |
|--------------|------------------|-------------------------|
| CAS: 57-55-6 | Propylene glycol | 7,900 mg/m <sup>3</sup> |
|--------------|------------------|-------------------------|

**7 Handling and storage**

- **Handling:**
- **Precautions for safe handling** No special measures required.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

**8 Exposure controls/personal protection**

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**  
 The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.  
 At this time, the remaining constituent has no known exposure limits.

**CAS: 57-55-6 Propylene glycol**

|      |                                       |
|------|---------------------------------------|
| WEEL | Long-term value: 10 mg/m <sup>3</sup> |
|------|---------------------------------------|

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- **Additional information:** The lists that were valid during the creation were used as a basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
 The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:** Not required.
- **Protection of hands:**  
 The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
 Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
 Selection of the glove material should be based on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**  
 The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**  
 The exact break through time has to be determined by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Goggles recommended during refilling.

### 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

|               |                                    |
|---------------|------------------------------------|
| <b>Form:</b>  | Liquid                             |
| <b>Color:</b> | According to product specification |

|              |                                    |
|--------------|------------------------------------|
| <b>Odor:</b> | According to product specification |
|--------------|------------------------------------|

|                        |                 |
|------------------------|-----------------|
| <b>Odor threshold:</b> | Not determined. |
|------------------------|-----------------|

|                  |                 |
|------------------|-----------------|
| <b>pH-value:</b> | Not determined. |
|------------------|-----------------|

· **Change in condition**

|                                     |                   |
|-------------------------------------|-------------------|
| <b>Melting point/Melting range:</b> | -68 °C (-90.4 °F) |
|-------------------------------------|-------------------|

|                                     |               |
|-------------------------------------|---------------|
| <b>Boiling point/Boiling range:</b> | Undetermined. |
|-------------------------------------|---------------|

|                     |                   |
|---------------------|-------------------|
| <b>Flash point:</b> | 107 °C (224.6 °F) |
|---------------------|-------------------|

|                                       |                 |
|---------------------------------------|-----------------|
| <b>Flammability (solid, gaseous):</b> | Not applicable. |
|---------------------------------------|-----------------|

|                              |                   |
|------------------------------|-------------------|
| <b>Ignition temperature:</b> | 371 °C (699.8 °F) |
|------------------------------|-------------------|

|                                   |                 |
|-----------------------------------|-----------------|
| <b>Decomposition temperature:</b> | Not determined. |
|-----------------------------------|-----------------|

|                       |                              |
|-----------------------|------------------------------|
| <b>Auto igniting:</b> | Product is not selfigniting. |
|-----------------------|------------------------------|

|                             |   |
|-----------------------------|---|
| <b>Danger of explosion:</b> | Product does not present an explosion hazard. |
|-----------------------------|---|

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|   |
|---|
| <ul style="list-style-type: none"> <li>· <b>Explosion limits:</b></li> <li style="padding-left: 20px;">Lower: 2.6 Vol %</li> <li style="padding-left: 20px;">Upper: 12.6 Vol %</li> </ul>   |
| <ul style="list-style-type: none"> <li>· <b>Vapor pressure at 20 °C (68 °F):</b> 0.11 hPa (0.1 mm Hg)</li> </ul>  |
| <ul style="list-style-type: none"> <li>· <b>Density at 20 °C (68 °F):</b> 1.0362 g/cm<sup>3</sup> (8.64709 lbs/gal)</li> <li>· <b>Relative density</b> Not determined.</li> <li>· <b>Vapor density</b> Not determined.</li> <li>· <b>Evaporation rate</b> Not determined.</li> </ul>  |
| <ul style="list-style-type: none"> <li>· <b>Solubility in / Miscibility with Water:</b> Fully miscible.</li> </ul>  |
| <ul style="list-style-type: none"> <li>· <b>Partition coefficient (n-octanol/water):</b> Not determined.</li> </ul>   |
| <ul style="list-style-type: none"> <li>· <b>Viscosity:</b></li> <li style="padding-left: 20px;">Dynamic: Not determined.</li> <li style="padding-left: 20px;">Kinematic: Not determined.</li> </ul>   |
| <ul style="list-style-type: none"> <li>· <b>Solvent content:</b></li> <li style="padding-left: 20px;">Organic solvents: 99.0 %</li> <li style="padding-left: 20px;">VOC content: 99.00 %</li> <li style="padding-left: 20px;">990.0 g/l / 8.26 lb/gal</li> <li>· <b>Other information</b> No further relevant information available.</li> </ul> |

**10 Stability and reactivity**

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
 No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

**11 Toxicological information**

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.

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· **Additional toxicological information:**

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

**12 Ecological information**

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Generally not hazardous for water
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

**13 Disposal considerations**

- **Waste treatment methods**
- **Recommendation:** Smaller quantities can be disposed of with household waste.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

**14 Transport information**

- **UN-Number**
- **DOT, ADR, ADN, IMDG, IATA** Not Regulated

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|  |  |
|--|--|
| · <b>UN proper shipping name</b><br>· DOT, ADR, ADN, IMDG, IATA                      | Not Regulated  |
| · <b>Transport hazard class(es)</b><br>· DOT, ADR, ADN, IMDG, IATA<br>· <b>Class</b> | Not Regulated  |
| · <b>Packing group</b><br>· DOT, ADR, IMDG, IATA                                     | Not Regulated  |
| · <b>Environmental hazards:</b><br>· <b>Marine pollutant:</b>                        | No   |
| · <b>Special precautions for user</b>  | Not applicable.                                      |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>     | Not applicable.                                      |
| · <b>Transport/Additional information:</b>   | Not dangerous according to the above specifications. |
| · <b>UN "Model Regulation":</b>  | Not Regulated  |

**15 Regulatory information**

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **TSCA new (21st Century Act) (Substances not listed)**

CAS: 18640-74-9 | 2-Isobutyl Thiazole

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

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· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **GHS label elements**

Pictograms on label shall be in the shape of a square set at a point and shall include a black hazard symbol on a white background with a red frame sufficiently wide to be clearly visible.

· **Hazard pictograms** Not Applicable

· **Signal word** Not Applicable

· **Hazard statements** Not Applicable

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H226 Flammable liquid and vapor.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

· **Department issuing SDS:** Product Safety Department

· **Contact:**

Product Safety Department

productsafety@adv-bio.com

· **Date of preparation / last revision** 08/24/2018 / -

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

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Flam. Liq. 3: Flammable liquids – Category 3  
Skin Irrit. 2: Skin corrosion/irritation – Category 2  
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A  
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

US