SAFETY DATA SHEET

Section 1: Identification

Product identifier used on the label;

- **Product name:** ANIT-FUNGAL TABLET
- **Product code:** MXA29009

Other means of identification;

No information

Recommended use of the chemical and restrictions on use;

- **Recommended use:** Protection for optical devices
- **Restrictions on use:** No information

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party;

- **Name:** NIKON CORPORATION
- **Department in Charge:** Healthcare Business Unit
- **Address:** 471, Nagaodai-cho, Sakae-ku, Yokohama, Kanagawa 244-8533
- **Telephone number:** +81-45-853-8608
- **Fax number:** +81-45-853-8485
- **e-mail address:** Msqa.Manager@nikon.com
- **Emergency phone number:** +81-45-853-8608

Section 2: Hazard(s) identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

**Physical Hazards**

Not classified

**Health Hazards**

- Acute toxicity (oral): Category 4
- Acute toxicity (inhalation: dust/mist): Category 3
- Serious eye damage/eye irritation: Category 1
- Skin sensitization: Category 1
- Specific target organ toxicity repeated or prolonged exposure: Category 1 (larynx)

**Environmental Hazards**

- Hazardous to the aquatic environment (acute): Category 1
- Hazardous to the aquatic environment (chronic): Category 1
### Other Hazards

No information

Signal word, hazard statement(s), symbol(s) and precautionary statement(s) in accordance with paragraph (f) of §1910.1200:

**Symbol(s)**

<table>
<thead>
<tr>
<th>Signal word</th>
<th>Danger</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hazard Statement(s)</strong></td>
<td>H302: Harmful if swallowed</td>
</tr>
<tr>
<td></td>
<td>H317: May cause an allergic skin reaction</td>
</tr>
<tr>
<td></td>
<td>H318: Causes serious eye damage</td>
</tr>
<tr>
<td></td>
<td>H331: Toxic if inhaled</td>
</tr>
<tr>
<td></td>
<td>H372: Causes damage to larynx through prolonged or repeated exposure</td>
</tr>
<tr>
<td></td>
<td>H400: Very toxic to aquatic life</td>
</tr>
<tr>
<td></td>
<td>H410: Very toxic to aquatic life with long lasting effects</td>
</tr>
</tbody>
</table>

**Precautionary Statement(s)**

**[Prevention]**

<table>
<thead>
<tr>
<th>Prevention</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>P260: Do not breathe dust/fume/gas/mist/ vapors/spray.</td>
<td></td>
</tr>
<tr>
<td>P264: Wash hands thoroughly after handling.</td>
<td></td>
</tr>
<tr>
<td>P270: Do not eat, drink or smoke when using this product.</td>
<td></td>
</tr>
<tr>
<td>P271: Use only outdoors or in a well-ventilated area.</td>
<td></td>
</tr>
<tr>
<td>P272: Contaminated work clothing must not be allowed out of the workplace.</td>
<td></td>
</tr>
<tr>
<td>P273: Avoid release to the environment.</td>
<td></td>
</tr>
<tr>
<td>P280: Wear protective gloves/protective clothing/eye protection/face protection.</td>
<td></td>
</tr>
</tbody>
</table>

**[Emergency response]**

<table>
<thead>
<tr>
<th>Emergency response</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>P301+P312: If swallowed: Call a poison center/doctor/if you feel unwell.</td>
<td></td>
</tr>
<tr>
<td>P302+P352: If on skin: Wash with plenty of water.</td>
<td></td>
</tr>
<tr>
<td>P304+P340: If inhaled: Remove person to fresh air and keep comfortable for breathing.</td>
<td></td>
</tr>
<tr>
<td>P305+P351+P338: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</td>
<td></td>
</tr>
<tr>
<td>P310: Immediately call a poison center/doctor.</td>
<td></td>
</tr>
<tr>
<td>P314: Get medical advice/attention if you feel unwell.</td>
<td></td>
</tr>
<tr>
<td>P330: Rinse mouth.</td>
<td></td>
</tr>
<tr>
<td>P333+P313: If skin irritation or rash occurs: Get medical advice/attention.</td>
<td></td>
</tr>
<tr>
<td>P311: Call a poison center/doctor.</td>
<td></td>
</tr>
<tr>
<td>P363: Wash contaminated clothing before reuse.</td>
<td></td>
</tr>
</tbody>
</table>
P391: Collect spillage.

[Storage]
P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P405: Store locked up.

[Disposal]
P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

Description of any hazards not otherwise classified;
No information

Ingredient with unknown acute toxicity in the mixture
70% of the contents in mixture has no information on acute toxicity.

Section 3: Composition/information on ingredients

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No.</th>
<th>Concentration/concentration ranges (wt %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-Iodo-2-propynyl butylcarbamate</td>
<td>55406-53-6</td>
<td>30</td>
</tr>
<tr>
<td>Hydroxylapatite</td>
<td>1306-06-5</td>
<td>20</td>
</tr>
<tr>
<td>Magnesium stearate</td>
<td>557-04-0</td>
<td>2</td>
</tr>
<tr>
<td>D-Lactose Monohydrate(Organic)</td>
<td>64044-51-5</td>
<td>48</td>
</tr>
</tbody>
</table>

Section 4: First-aid measures

Necessary first-aid measures by relevant routes of exposure;

IF INHALED  Remove victim to fresh air and keep at rest in a position comfortable for breathing.
If symptoms continue, call a doctor/physician.

IF ON SKIN   Wash with plenty of water and soap.
Take off contaminated clothing and wash it before reuse.
If symptoms continue, call a POISON CENTER or doctor/physician.

IF IN EYES  Immediately rinse cautiously with water for 15 - 20 minutes.
Remove contact lenses, if present and easy to do. Continue rinsing. If symptoms continue, call a doctor/physician.

IF SWALLOWED Rinse mouth. Immediately get medical advice/attention.
If unconscious, do not give anything by mouth.

Most important symptoms/effects, acute and delayed;

Harmful if swallowed.
May cause an allergic skin reaction.
Causes serious eye damage.
Toxic if inhaled.
Causes damage to larynx through prolonged or repeated exposure.
Indication of immediate medical attention and special treatment needed, if necessary;

No information

Section 5: Fire-fighting measures

Suitable (and unsuitable) extinguishing media;

Suitable extinguishing media:

Use water mist, dry chemical powder, fire foam or carbon dioxide.

Unsuitable extinguishing media

Applying direct water may be dangerous because fire may expand to surroundings.

Specific hazards arising from the chemical;

May produce toxic gases (e.g. carbon monoxide, nitrogen oxides or halogen compounds) by combustion.

Special protective equipment and precautions for fire-fighters;

Cut off any ignition sources and extinguish with an appropriate agent.
Cool the surrounding tank and the buildings with direct water jet to avoid risk of fire spreading.
Take action from windward.
Keep out except responsible personnel.
Move container to a safe area if it can be done without risk.
Wear suitable self-contained breathing apparatus and heat resistant protective clothing for eyes and skin.

Section 6: Accidental release measures

Personal precautions, protective equipment, and emergency procedures;

Keep out except responsible personnel.
Wear suitable protective equipment described in “Section 8: Exposure controls/personal protection”.
Avoid release into the environment because product may cause local effects.

Methods and materials for containment and cleaning up;

Sweep up scattered materials or vacuum them using a vacuum cleaner so as not to cause dust then collect them into an empty container.
Do not eat or drink near handling and storage locations.
Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area).
Prevent to flowing into drains, sewers, basements or closed areas.
Section 7: Handling and storage

Precautions for safe handling

Protective measures:
Install appropriate equipment and wear suitable protective apparatus described in "Section 8: Exposure controls/personal protection".
Do not handle until all safety precautions have been read and understood.
Wear suitable protective equipment to prevent any contamination of skin or eyes.
Described in "Section 10: Stability and reactivity".

Advice on general occupational hygiene:
Wash hands and face thoroughly and gargle the throat after handling.

Conditions for safe storage, including any incompatibilities

Technical measures:
In the storage area, install adequate light and ventilation systems to handle hazardous materials.
Take precautionary measures against static discharge.

Incompatible materials:
Oxidizer

Conditions for safe storage:
Avoid storing under high temperature and high humidity. Store at room temperature.

Packing material:
Use a sealed container without damage or leakage.

Section 8: Exposure controls/personal protection

Occupational Exposure Limits:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>10 mg/m³ (Inhalable fraction) (Magnesium stearate)</td>
<td>Not applicable</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 mg/m³ (Respirable fraction) (Magnesium stearate)</td>
<td></td>
</tr>
</tbody>
</table>

Appropriate engineering controls;
In a work place where dusts generate, ensure to use sealed instrument or local ventilation.

Individual protection measures, such as personal protective equipment;

<table>
<thead>
<tr>
<th>Protection Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory protection</td>
<td>In case of dust generation, wear appropriate protective mask or air aspirator as required.</td>
</tr>
<tr>
<td>Hand protection</td>
<td>If hand contact is possible, wear protective gloves.</td>
</tr>
<tr>
<td>Eye protection</td>
<td>Wear safety glasses or goggles if in eyes.</td>
</tr>
<tr>
<td>Skin and body protection</td>
<td>Wear protective clothing and apron if necessary.</td>
</tr>
</tbody>
</table>
### Section 9: Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance (physical state, color, etc.)</td>
<td>Solid</td>
</tr>
<tr>
<td>Odor</td>
<td>No information</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information</td>
</tr>
<tr>
<td>pH</td>
<td>No information</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No information</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>No information</td>
</tr>
<tr>
<td>Flash point</td>
<td>No information</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>No information</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No information</td>
</tr>
<tr>
<td>Vapor density</td>
<td>No information</td>
</tr>
<tr>
<td>Relative density</td>
<td>No information</td>
</tr>
<tr>
<td>Solubility (ies)</td>
<td>No information</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No information</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No information</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No information</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No information</td>
</tr>
</tbody>
</table>

**Other information**

No information

### Section 10: Stability and reactivity

**Reactivity**

Stable under normal handling condition.

**Chemical stability**

Stable under normal handling condition.

**Possibility of hazardous reactions**

No hazardous reaction expected under normal handling.

**Conditions to avoid**

Avoid sunlight. Store in a cool place.

**Incompatible materials**

Oxidizer
Hazardous decomposition products

May produce toxic gases (e.g. carbon monoxide, nitrogen oxides or halogen compounds) by combustion.

Section 11: Toxicological information

Symptoms related to the physical, chemical and toxicological characteristics;

Information on product:

No information

Information on ingredients:

3-Iodo-2-propynyl butylcarbamate

- Acute toxicity (oral): $\text{Rat LD}_{50} = 300 - 500 \text{ mg/kg}$
- Acute toxicity (dermal): $\text{Rat LD}_{50} > 5,000 \text{ mg/kg}$
- Acute toxicity (inhalation: dust/mist): $\text{Rat 4h-LD}_{50} = 0.67 \text{ mg/L}$
- Serious eye damage/irritation: Causes serious eye damage.

- Skin sensitization: May cause an allergic skin reaction.

- STOT-repeated exposure: Causes damage to larynx through prolonged or repeated exposure.

- Other toxicological information: No information

Hydroxylapatite

- Acute toxicity (oral): $\text{Rat LD}_{50} \geq 1,000 \text{ mg/kg}$ (As dry product of $\text{Ca}_3(\text{PO}_4)_2$)

- Other toxicological information: No information

Magnesium stearate

- Acute toxicity (oral): $\text{Rat LD}_{50} > 10,000 \text{ mg/kg}$ (as Zinc stearate)
- Mouse $\text{LD}_{50} > 10,000 \text{ mg/kg}$ (as Zinc stearate)

- Specific target organ toxicity repeated exposure: If swallowed high concentrations of dust for a long period or repeatedly, may cause progressive chemical pneumonitis.

- Other toxicological information: No information

D-Lactose Monohydrate

- Acute toxicity (oral): $\text{Rat LD}_{50} > 10 \text{ g/kg}$

- Other toxicological information: D-Lactose Monohydrate is separated from milk and it is considered to be extremely low in hazard because it is used as food.

Delayed and immediate effects and also chronic effects from short- and long-term exposure;

- Harmful if swallowed.
- May cause an allergic skin reaction.
- Causes serious eye damage.
- Toxic if inhaled.
Numerical measures of toxicity (such as acute toxicity estimates);
Acute toxicity was estimated based on ingredients of the product by additivity formula.

Whether the chemical is listed in the NTP Report on Carcinogens or has been found to be a potential carcinogen in the IARC Monographs, or by OSHA;
IARC: Not listed as Group 1, Group 2A or Group 2B
NTP Report: Not listed
OSHA: Not listed

Section 12: Ecological information

Ecotoxicity:
Information on product: No information

Information on ingredients:
3-Iodo-2-propynyl butylcarbamate
Aquatic acute toxicity: Fish (Oncorhynchus mykiss) 96h LC₅₀ = 0.067 mg/L
Aquatic chronic toxicity: Fish (Pimephales promelas) 35d NOEC = 0.0084 mg/L

Persistence and degradability:
Information on product: No information

Information on ingredients:
3-Iodo-2-propynyl butylcarbamate
IPBC rapidly changes to PBC in the environment.

Magnesium stearate
Although there is no data of this substance, in the case of lead stearate, because biodegradability is judged to be good, this product is also judged to have good biodegradability.

D-Lactose Monohydrate
Biodegradable

Bioaccumulative potential:
Information on product: No information

Information on ingredients:
3-Iodo-2-propynyl butylcarbamate
Log Pow = 2.8

Magnesium stearate
Log P = ca. 14
Bioaccumulation in aquatic organisms is considered as negligible or low because the substances with
Log $P >$ ca. 7 is insoluble in water.

Mobility in soil:
Information on product: No information
Information on ingredients: No information

Other adverse effects:
No information

Section 13: Disposal considerations

Waste treatment methods
Dispose of waste in accordance with applicable local, regional and international regulations and standards.
When disposing, consult a certificated waste trader or local offices if they deal with the waste.
Contents should be removed completely when dispose of empty containers.

Section 14: Transport information

UN number 2811
UN proper shipping name TOXIC SOLID, ORGANIC, N.O.S.
Transport hazard class(es) 6.1
Packing group III
Environmental hazards Applicable

Transport in bulk according to Annex II of MARPOL 73/78 and IBC code Not applicable

Special precautions for user
When transporting, avoid direct sunlight. Confirm no leakage to containers. When loading, prevent containers from falling, dropping off or damaging. Take preventive measures of collapse.

Section 15: Regulatory information

OSHA: Hazardous chemical
TSCA inventory: Listed (3-iodo-2-propynyl butylcarbamate, Hydroxylapatite, Magnesium stearate)
TSCA SNUR: Not listed
SARA Title III: Section 313 (TRI Chemicals): 3-iodo-2-propynyl butylcarbamate
CERCLA Reportable Quantity: Not listed
Clean Air Act: This product does not contain any substances regulated as hazardous air pollutants under Section 112 of the Clean Air Act.
Clean Water Act: This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act.
Section 16: Other information, including date of preparation or last revision

Update history:
  Date of issue: 12th September, 2019

References:
  ACGIH, American Conference of Governmental Industrial Hygienists (2017) TLVs and BEIs.

Product Info
This product contains two (2) pieces per package.
The weight per piece is 100 mg.

[Disclaimer]
This SDS has been prepared based on the best available information however, it may not be sufficient in some cases. It is user’s responsibility to modify or update any contents in this SDS regarding information on hazardous properties and/or instruction for safe handling of the product when they become available. Precautionary measures in this SDS are only applicable for normal handling conditions and it is necessary to take appropriate additional measures to ensure safe handling which depend on your specific use conditions or situations.