SAFETY DATA SHEET

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

1.1. Product identifier

Product name: ANIT-FUNGAL TABLET
Product code: MXA29009

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

Identified uses: Protection for optical devices
Uses advised against: No information

1.3. Details of the supplier of the safety data sheet

Name of supplier (importer):	Nikon Instruments Europe B.V.
Department in Charge	Marketing
Address	Tripolis 100, Burgerweeshuispad 101, 1076 ER Amsterdam, The Netherlands
Telephone number	+31-20-7099-000
Fax number	+31-20-7099-298
e-mail address	microscope.eu@nikon.com
Name of manufacturer in Japan:	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

1.4. Emergency telephone number

+81-45-853-8608

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008:

Acute Tox. 4: H302
Acute Tox. 3: H331
Eye Dam. 1: H318
Skin Sens. 1: H317
STOS RE. 1: H372
Aquatic Acute. 1: H400
Aquatic Chronic. 1: H410

2.2. Label elements

Pictogram

Signal word	**Danger**
Hazard Statements	H302: Harmful if swallowed H317: May cause an allergic skin reaction H318: Causes serious eye damage H331: Toxic if inhaled H372: Causes damage to larynx through prolonged or repeated exposure H400: Very toxic to aquatic life H410: Very toxic to aquatic life with long lasting effects
Precautionary Statements	
[Prevention]	P260: Do not breathe dust/fume/gas/mist/vapours/spray. P280: Wear protective gloves/protective clothing/eye protection/face protection.
[Emergency response]	P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310: Immediately call a POISON CENTER/doctor.
[Storage]	P403+P233: Store in a well-ventilated place. Keep container tightly closed.
[Disposal]	P501: Dispose of contents/ container in accordance with related laws and local/ regional regulations.

2.3. Other hazards

The product does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII.

SECTION 3: Composition/information on ingredients

3.1. Substances Not applicable

3.2. Mixtures

Product Name: ANIT-FUNGAL TABLET

Information on ingredients:

Chemical name	CAS No.	EC No.	Index No.	REACH Registration No.*	Concentration (wt %)	Classification
3-iodo-2-propynyl butylcarbamate	55406-53-6	259-627-5	616-212-00-7	-	30	Acute Tox. 4: H302 Eye Dam. 1: H318 Skin Sens. 1: H317 Acute Tox. 3: H331 STOT RE 1: H372 (larynx) Aquatic Acute 1: H400 Aquatic Chronic 1: H410
Hydroxylapatite	1306-06-5	215-145-7	-	-	20	-
Magnesium stearate	557-04-0	209-150-3	-	-	2	-
D-Lactose Monohydrate (Organic)	64044-51-5	-	-	-	48	-

* Registration numbers of ingredients which shall be in compliance with Regulation (EC) No 1907/2006 will be filled in later.

SECTION 4: First aid measures

4.1. Description of first aid measures

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.

4.2. Most important symptoms and effects, both 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.

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

No information

SECTION 5: Firefighting measures

5.1. 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.

5.2. Special hazards arising from the substance or mixture

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

5.3. Advice for firefighters

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

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:

Wear suitable protective equipment (see Section 8) e.g., safety gloves, protective mask and/or protective glasses to prevent exposure.

For emergency responders:

Keep out except responsible personnel.
Wear suitable protective equipment described in “SECTION 8: Exposure controls/personal protection”.

6.2. Environmental precautions

Avoid release into the environment because product may cause local effects.

6.3. Methods and material 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.

6.4. Reference to other sections

Refer to “SECTION 8: Exposure controls/personal protection” and “SECTION 13: Disposal considerations” as appropriate.

SECTION 7: Handling and storage

7.1. 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.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures:

Install appropriate equipment and wear suitable protective apparatus described in “SECTION 8: Exposure controls/personal protection”.

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.

7.3. Specific end use(s)

Protection for optical devices

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Acceptable concentration (exposure limit, biological exposure index)

EU IOELV	Not applicable
ACGIH TLV-TWA (2017)	10 mg/m^3 (Inhalable fraction) (Magnesium stearate) 3 mg/m^3 (Respirable fraction) (Magnesium stearate)
ACGIH TLV-STEL (2017)	Not applicable

8.2. Exposure controls

Appropriate engineering controls:

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

Personal protective equipment:

Respiratory protection	In case of dust generation, wear appropriate protective mask or air aspirator as required.
Hand protection	If hand contact is possible, wear protective gloves.
Eye protection	Wear safety glasses or goggles if in eyes.
Skin and body protection	Wear protective clothing and apron if necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance (physical state, form and colour)	Solid
Odour	No information
Odour threshold	No information
pH	No information
Melting point/freezing point	No information
Initial boiling point and boiling range	No information
Flash point	No information
Evaporation rate	No information
Flammability (solid, gas)	No information
Upper/lower flammability or explosive limits	No information
Vapour pressure	No information
Vapour density	No information
Relative density	No information
Solubility (ies)	No information
Partition coefficient: *n*-octanol/water	No information
Auto-ignition temperature	No information
Decomposition temperature	No information
Viscosity	No information
Explosive properties	No information
Oxidising properties	No information

9.2. Other information

No information

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal handling condition.

10.2. Chemical stability

Stable under normal handling condition.

10.3. Possibility of hazardous reactions

No hazardous reaction expected under normal handling.

10.4. Conditions to avoid

Avoid sunlight. Store in a cool place.

10.5. Incompatible materials

Oxidizer

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on product:

No information

Information on ingredients:

3-Iodo-2-propynyl butylcarbamate

Acute toxicity (oral):	Classified as “Acute Tox. 4: H302” according to EC No 1272/2008.
Acute toxicity (dermal):	Rat LD_{50} > 5,000 mg/kg
Acute toxicity (inhalation: dust/mist):	Classified as “Acute Tox. 3: H331” according to EC No 1272/2008.
Serious eye damage/irritation:	Classified as “Eye Dam. 1: H318” according to EC No 1272/2008.
Skin sensitization:	Classified as “Skin Sens. 1: H317” according to EC No 1272/2008.
STOT-repeated exposure:	Classified as “STOT RE 1: H372 (larynx)” according to EC No 1272/2008.
Other toxicological information	No information

Hydroxylapatite

Acute toxicity (oral):	Rat $LD_{50} \geq 1{,}000$ mg/kg (As dry product of $Ca_3(PO_4)_2$)
Other toxicological information	No information

Magnesium stearate

Acute toxicity (oral):	Rat $LD_{50} > 10{,}000$ mg/kg (as Zinc stearate) Mouse $LD_{50} > 10{,}000$ 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):	Rat $LD_{50} > 10$ 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.

SECTION 12: Ecological information

12.1. Toxicity:

Information on product: No information

Information on ingredients:

3-Iodo-2-propynyl butylcarbamate

Aquatic acute toxicity:	Fish (*Oncorhynchus mykiss*) 96h $LC_{50} = 0.067$ mg/L
Aquatic chronic toxicity:	Fish (*Pimephales promelas*) 35d NOEC = 0.0084 mg/L

12.2. 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

12.3. 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 $\geq$ ca. 7 is insoluble in water.

12.4. Mobility in soil:

Information on product: No information

Information on ingredients: No information

12.5. Results of PBT and vPvB assessment:

The product does not meet the PBT and vPvB criteria.

12.6. Other adverse effects:

No information

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose of waste in accordance with applicable local, regional and international regulations and standards.

When disposing, consult to a certificated waste trader or local offices if they deal with the waste.

Used container should be recycled after cleaning or dispose of in compliance with related laws and local regulations.

Contents should be removed completely when dispose of empty containers.

SECTION 14: Transport information

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

14.6. 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.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and IBC code

Not applicable

SECTION 15: Regulatory information

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

The product and its ingredients are not regulated by specific provisions related to protection of human health or the environment at EU level, e.g. not considered as SVHCs or POPs.

15.2. Chemical safety assessment

Not conducted

SECTION 16: Other information

Update history:

Date of issue: 12th September, 2019

References:

NITE GHS classification results (http://www.safe.nite.go.jp/ghs/list.html). (2018)
ACGIH, American Conference of Governmental Industrial Hygienists (2017) TLVs and BEIs.

Abbreviations

PBT: Persistent, Bioaccumulative and Toxic substance
POPs: Persistent Organic Pollutants
STOT: Specific Target Organ Toxicity
SVHC: Substances of Very High Concern
vPvB: Very Persistent and Very Bioaccumulative

[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.