

IKI-220 500WG

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Issue date: 6/7/2018 Revision date: 9/18/2020 Supersedes version of: 8/19/2019 Version: 4.0

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

1.1. Product identifier

Product form : Mixture
Trade name : Mainman, Teppeki, Teppeki 50WG, Teppeki 500WG, Hinode, Afinto
Product code : IKI-220 500WG, IKI-220 50%WG, IBE-3894

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Insecticide

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

ISK Biosciences Europe N.V.
Pegasus Park, De Kleetlaan 12B - box 9
B-1831 Diegem - Belgium
T +32 2 627 86 11 - F +32 2 627 86 00
isk-msds@isk.be

1.4. Emergency telephone number

Emergency number : +32 14 58 45 45

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Eye Irrit. 2 H319

Full text of hazard classes and H-statements : see section 16

Adverse physicochemical, human health and environmental effects

Causes serious eye irritation.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) :

Warning

Hazard statements (CLP) :

H319 - Causes serious eye irritation.

Precautionary statements (CLP) :

P264 - Wash hands, forearms and face thoroughly after handling.
P280 - Wear protective gloves, protective clothing, eye protection, face protection.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 - If eye irritation persists: Get medical advice/attention.
EUH208 - Contains Disodium maleate(371-47-1). May produce an allergic reaction.
EUH401 - To avoid risks to human health and the environment, comply with the instructions for use.

EUH-statements

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

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SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Flonicamid (ISO)	(CAS-No.) 158062-67-0 (EC Index-No.) 616-216-00-9	50 – 80	Acute Tox. 4 (Oral), H302
Methylnaphtalenesulfonic acid/formaldehyde, copolymer, sodium salt	(CAS-No.) 81065-51-2	1 – 5	Eye Irrit. 2, H319 Aquatic Chronic 3, H412
Docusate sodium	(CAS-No.) 577-11-7 (EC-No.) 209-406-4	1 – 5	Skin Irrit. 2, H315 Eye Dam. 1, H318
2,5-Furandione, polymer with 2,4,4-trimethylpentene, sodium salt	(CAS-No.) 37199-81-8	1 – 5	Eye Irrit. 2, H319
Isotridecanol, ethoxylated	(CAS-No.) 69011-36-5 (EC-No.) 500-241-6	1 – 5	Aquatic Chronic 3, H412
Disodium maleate	(CAS-No.) 371-47-1 (EC-No.) 206-738-1	0,1 - 0,5	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT SE 3, H335
toluene (Impurity)	(CAS-No.) 108-88-3 (EC-No.) 203-625-9 (EC Index-No.) 601-021-00-3	< 0,2	Flam. Liq. 2, H225 Repr. 2, H361d Asp. Tox. 1, H304 STOT RE 2, H373 Skin Irrit. 2, H315 STOT SE 3, H336

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Consult a doctor/medical service if you feel unwell.
First-aid measures after inhalation	: Move the affected person to the fresh air. Respiratory problems: consult a doctor/medical service.
First-aid measures after skin contact	: Remove clothing before washing. Wash skin with mild soap and water. If case of redness or irritation, get medical advice/attention.
First-aid measures after eye contact	: Rinse with plenty of water. Do not apply (chemical) neutralizing agents. Consult an ophthalmologist if irritation persists.
First-aid measures after ingestion	: Rinse mouth out with water. Do not give an unconscious person anything to drink. Do not induce vomiting. Get immediate medical advice/attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation	: Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure.
Symptoms/effects after eye contact	: Causes serious eye irritation.

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

Treat symptomatically.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Polyvalent foam. Powder ABC . Carbon dioxide (CO₂).
Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic and corrosive gases are released. Hydrogen cyanide. Hydrofluoric acid. Carbon monoxide (CO). Carbon dioxide (CO₂). Nitrogen oxides.

5.3. Advice for firefighters

Firefighting instructions : Cool tanks/drums with water spray/remove them into safety. Dilute toxic gases with water spray.
Protection during firefighting : Gloves. Protective non-flammable clothing. Dust cloud production: compressed air/oxygen apparatus. Heat/fire exposure: compressed air/oxygen apparatus. Gas-tight suit.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid dust production.

6.1.1. For non-emergency personnel

Protective equipment : Concerning personal protective equipment to use, see section 8.
Emergency procedures : Avoid contact with eyes. Do not breathe dust.

6.1.2. For emergency responders

Protective equipment : Protective gloves. Protective clothing. Dust cloud production: compressed air/oxygen apparatus.

6.2. Environmental precautions

Prevent soil and water pollution. Do not flush down sewers. Stop leak if safe to do so. Contain the spilled material by bunding. Knock down/dilute dust cloud with water spray.

6.3. Methods and material for containment and cleaning up

For containment : Knock down/dilute dust cloud with water spray. Take up liquid spill into inert absorbent material. Sweep or shovel spills into appropriate container for disposal. Store in tightly closed, leak-proof containers.
Methods for cleaning up : Clean contaminated surfaces with an excess of water.
Other information : Dispose of contaminated materials in accordance with current regulations. Wash clothing and equipment after handling.

6.4. Reference to other sections

Concerning disposal elimination after cleaning, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid dust formation. Do not discharge the waste into the drain.
Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke during use. If on skin, take off contaminated clothing. Always wash hands after handling the product. Wash clothing and equipment after handling. Skin contact : Refer to section 4.1.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep the container hermetically sealed. Store at ambient temperature.
Heat and ignition sources : Protect from heat and direct sunlight. Keep away from ignition sources.
Special rules on packaging : Store in original container.

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7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

toluene (108-88-3)

EU - Occupational Exposure Limits

Local name	Toluene
IOELV TWA (mg/m ³)	192 mg/m ³
IOELV TWA (ppm)	50 ppm
IOELV STEL (mg/m ³)	384 mg/m ³
IOELV STEL (ppm)	100 ppm
Notes	Skin
Regulatory reference	COMMISSION DIRECTIVE 2006/15/EC

8.2. Exposure controls

Appropriate engineering controls:

Provide local exhaust or general room ventilation.

Hand protection:

Protective gloves. Breakthrough time : refer to the recommendations of the supplier. The protective gloves to be used must comply with the specifications of Regulation (EC) No. 2016/425

Eye protection:

Safety glasses. If dust are formed : Safety glasses with side shields

Skin and body protection:

Protective clothing

Respiratory protection:

In case of dust formation use respirator with filter: P1

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Granulate.
Colour	: Brown.
Odour	: Faint odour of ammonia.
Odour threshold	: No data available
pH	: No data available
pH solution	: 8.3 (1%) (22 °C)
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: Not applicable
Flash point	: Not applicable

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Auto-ignition temperature	: Not self-igniting
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not flammable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: Not applicable
Density	: 0.543 g/ml (before compaction) ; 0.582 g/ml (after compaction)
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: Not applicable
Explosive properties	: Not explosive.
Oxidising properties	: Non oxidizing.
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid dust production.

10.5. Incompatible materials

None to our knowledge.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: Not classified (Based on available data, the classification criteria are not met)

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LD50 oral rat	> 2000 mg/kg bodyweight (female / male) (OECD 423 method)
LD50 dermal rat	> 2000 mg/kg bodyweight (female / male) (OECD 402 method)
LC50 Inhalation - Rat	> 5.36 mg/l

Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met)
Additional information	: Not irritating to rabbits on cutaneous application (OECD 404 method)
Serious eye damage/irritation	: Causes serious eye irritation.

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Additional information	: Irritating to rabbits on ocular application (OECD 405 method)
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met)
Additional information	: Does not cause cutaneous sensitisation for guinea-pigs (OECD 406 method)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)

Flonicamid (ISO) (158062-67-0)

NOAEL (chronic, oral, animal/male, 2 years)	7.32 mg/kg bw/day (rat)
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Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
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Flonicamid (ISO) (158062-67-0)

NOAEL (animal/male, F0/P)	18 mg/kg bw/day (rat) (OECD 416 method)
NOAEL (animal/male, F1)	30 mg/kg bw/day (rat) (OECD 416 method)
NOAEL, oral, rat, male	109 mg/kg bw/day (18 months, OECD 416 method)
NOAEL, maternal, oral, rat, female	100 mg/kg bw/day (OECD 414 method)
NOAEL, maternal, oral, rabbit, female	7.5 mg/kg bw/day (OECD 414 method)
NOAEL, Developmental toxicity, oral, rat, female	100 mg/kg bw/day (OECD 414 method)
NOAEL, Developmental toxicity, oral, rabbit, female	> 25 mg/kg bw/day (OECD 414 method)

STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met)
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STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met)
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Flonicamid (ISO) (158062-67-0)

NOAEL (subchronic, oral, animal/female, 90 days)	60 mg/kg bw/day (rat) (OECD 408 method)
NOAEL (mouse)	15.3 mg/kg bw/day (male/female)
NOAEL (Dog)	8 mg/kg bw/day (male/female)

Aspiration hazard	: Not classified (Technical impossibility to obtain the data)
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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified (Based on available data, the classification criteria are not met)
Hazardous to the aquatic environment, long-term (chronic)	: Not classified (Based on available data, the classification criteria are not met)

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LC50 fish	> 100 mg/l (96 Hours) (Oncorhynchus mykiss)
EC50 Daphnia 1	> 100 mg/l (48 Hours) (Daphnia magna)
ErC50 (algae)	> 100 mg/l (72 Hours) (Pseudokirchneriella subcapitata)

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Flonicamid (ISO) (158062-67-0)

NOEC (acute)	> 100 mg/l (96 Hours) (Oncorhynchus mykiss (Rainbow trout); Lepomis macrochirus (Bluegill)) (OECD 203 method)
NOEC chronic fish	10 mg/l (33 days) (Pimephales promelas) (OECD 210 method)
NOEC chronic crustacea	3.1 mg/l (21 days) (Daphnia magna) (OECD 211 method)
NOEC chronic algae	46 mg/l (72 Hours) (Pseudokirchneriella subcapitata) (OECD 201 method)

12.2. Persistence and degradability

Flonicamid (ISO) (158062-67-0)

Persistence and degradability	Not readily biodegradable. Half-life (in soil) : 1.1 days; Half-life (in water): 30.3 - 37.3 days.
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Methylnaphthalenesulfonic acid/formaldehyde, copolymer, sodium salt (81065-51-2)

Persistence and degradability	Not rapidly degradable.
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Docusate sodium (577-11-7)

Persistence and degradability	Readily biodegradable.
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Isotridecanol, ethoxylated

Persistence and degradability	Readily biodegradable.
Biodegradation	> 60 % CO ₂ (28 days) (OECD 301B; ISO 9439; 92/69/EEC, C.4-C) ; >= 90 % Bismuth-active substance (OECD 301E) / By analogy

12.3. Bioaccumulative potential

Flonicamid (ISO) (158062-67-0)

Partition coefficient n-octanol/water (Log Pow)	-0.24 (20 °C)
Bioaccumulative potential	Not potentially bioaccumulable.

Isotridecanol, ethoxylated (69011-36-5)

Bioaccumulative potential	Negligible.
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12.4. Mobility in soil

Flonicamid (ISO) (158062-67-0)

Partition coefficient n-octanol/water (Log Koc)	0.77
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12.5. Results of PBT and vPvB assessment

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This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

No additional information available

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	: Do not dispose of with domestic waste.
Product/Packaging disposal recommendations	: Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber. Dispose of in accordance with relevant local regulations.
Ecology - waste materials	: Do not discharge into drains or rivers.
European List of Waste (LoW) code	: 07 04 99 - wastes not otherwise specified 15 01 02 - plastic packaging

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

Inland waterway transport

Not applicable

Rail transport

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

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Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

This sheet was updated (refer to the date at the top of this page). SDS changed sections : 1.

Abbreviations and acronyms:

PBT	Persistent Bioaccumulative Toxic
vPvB	Very Persistent and Very Bioaccumulative
LD50	Median lethal dose
LC50	Median lethal concentration
EC50	Median effective concentration
NOEC	No-Observed Effect Concentration
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
IMDG	International Maritime Dangerous Goods
IATA	International Air Transport Association
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
Log Pow	n-octanol/water partition coefficient
NOAEL	No-Observed Adverse Effect Level

Data sources : SDS of suppliers. ECHA (European Chemicals Agency).

Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H225	Highly flammable liquid and vapour.

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H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.
EUH208	Contains Disodium maleate. May produce an allergic reaction.
EUH401	To avoid risks to human health and the environment, comply with the instructions for use.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Eye Irrit. 2	H319	On basis of test data
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SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.