

SAFETY DATA SHEET

Based on Directive 2001/58/EC of the Commission of the European Communities

MAINMAN - FLONICAMID 50% WG

1. Identification of the substance/preparation and of the company/undertaking

1.1 Identification of the substance or preparation:

Synonyms: none
CAS NO. : N.A.
EC index No. : N.A.
EINECS No. : N.A.
RTECS No. : N.A.
NFPA code : N.D.
Molecular weight : N.A.
Formula : N.A.

1.2 Use of the substance or the preparation:

Aphicide

1.3 Company/undertaking identification:

ISK Biosciences Europe S.A.
Avenue Louise 480, Bte 12
B-1050 Brussel
Tel. : +32 2 627 86 11
Fax : +32 2 627 86 00

1.4 Telephone number for emergency:

+32 14 58 45 45
Brandweerinformatiecentrum voor gevaarlijke stoffen (B.I.G.)
Technische Schoolstraat 43A, B-2440 Geel

2. Composition/information on ingredients

Hazardous ingredients	CAS No. EINECS/ELINCS No.	Conc. in %	Hazard symbol	Risks (R-phrases)
flonicamid	158062-67-0	50	Xn	22 (1)

(1) For R-phrases in full: see heading 16

3. Hazards identification

- No hazard classification in accordance with directives 67/548/EEC and 1999/45/EC

4. First aid measures

4.1 Eye contact:

- Consult a doctor/medical service if irritation persists
- Rinse immediately with water
- Do not apply neutralizing agents

4.2 Skin contact:

- Consult a doctor/medical service if irritation persists
- Rinse with water
- Soap may be used

4.3 After inhalation:

- Consult a doctor/medical service if breathing problems develop
- Remove the victim into fresh air
- Unconscious: maintain adequate airway and respiration

4.4 After ingestion:

- Consult a doctor/medical service if you feel unwell
- Never give water to an unconscious person
- Do not induce vomiting

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Technische Schoolstraat 43 A, B-2440 Geel
☎ +32 14 58 45 47 http://www.big.be E-mail: info@big.be

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5. Fire-fighting measures

5.1 Suitable extinguishing media:

- Non combustible
- Water spray
- Polyvalent foam
- ABC powder
- Carbon dioxide

5.2 Unsuitable extinguishing media:

- No data available

5.3 Special exposure hazards:

- On heating/burning: release of toxic and corrosive gases/vapours e.g.: (nitrous vapours, hydrofluoric acid, carbon monoxide - carbon dioxide)

5.4 Instructions:

- Cool tanks/drums with water spray/remove them into safety
- Dilute toxic gases with water spray

5.5 Special protective equipment for firefighters:

- Heat/fire exposure: compressed air/oxygen apparatus
- Protective clothing for exposure to chemicals

6. Accidental release measures

6.1 Personal protection/precautions:

See heading 8.1/8.3/10.3

6.2 Environmental precautions:

- Contain released substance, pump over in suitable containers

6.3 Methods for cleaning up:

- Scoop solid spill into closing containers
- Clean contaminated surfaces with an excess of water

7. Handling and storage

7.1 Handling:

- Observe normal hygiene standards
- Avoid raising dust

7.2 Storage:

- Keep container tightly closed. Store at room temperature. Keep only in the original container. Meet the legal requirements.
- Keep away from: heat sources

Storage temperature	:	room temperature
Quantity limits	:	N.D. kg
Storage life	:	1095 days
Materials for packaging	:	
- suitable	:	polyethylene
- to avoid	:	no data available

7.3 Specific uses:

- See information supplied by the manufacturer

8. Exposure controls/Personal protection

8.1 Exposure limit values:

TLV-TWA : not listed
TLV-STEL : not listed
TLV-Ceiling : not listed

OES-LTEL : not listed
OES-STEL : not listed
MEL-LTEL : not listed
MEL-STEL : not listed

MAK : not listed
TRK : not listed

MAC-TGG 8 h : not listed
MAC-TGG 15 min. : not listed
MAC-Ceiling : not listed

VME-8 h : not listed
VLE-15 min. : not listed

GWBB-8 h : not listed
GWK-15 min. : not listed
Momentary value : not listed

EC : not listed
EC-STEL : not listed

Sampling methods:

- No data available

8.2 Exposure controls:

8.2.1 Occupational exposure controls:

- Work under local exhaust/ventilation

8.2.2 Environmental exposure controls: see heading 13

8.3 Personal protection:

8.3.1 respiratory protection:

- Dust formation: dust mask

8.3.2 hand protection:

- Gloves
- Suitable materials: No data available
- Breakthrough time: N.D.

8.3.3 eye protection:

- Safety glasses
- In case of dust production: protective goggles

8.3.4 skin protection:

- Protective clothing
- Suitable materials: No data available

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9. Physical and chemical properties

9.1 General information:

Appearance (at 20°C) : Solid / Grains
Odour : Slight odor of ammonia
Colour : Brown

9.2 Important health, safety and environmental information:

pH value : 8.3 (1 %)
Boiling point/boiling range : N.D. °C
Flashpoint : N.A. °C
Explosion limits : not explosive
Vapour pressure (at 20°C) : N.D. hPa
Vapour pressure (at 50°C) : N.D. hPa
Relative density (at 20°C) : 0.543
Water solubility : Soluble
Soluble in : water
Relative vapour density : N.D.
Viscosity : N.D. Pa.s
Partition coefficient n-octanol/water : 0.3
Evaporation rate :
 ratio to butyl acetate : N.D.
 ratio to ether : N.D.

9.3 Other information:

Melting point/melting range : N.D. °C
Auto-ignition point : neither flammable nor auto-flammable
Saturation concentration : N.D. g/m³

10. Stability and reactivity

10.1 Conditions to avoid/reactivity:

- Stable under normal conditions

10.2 Materials to avoid:

- Keep away from: heat sources

10.3 Hazardous decomposition products:

- On heating/burning: release of toxic and corrosive gases/vapours e.g.:
(nitrous vapours, hydrofluoric acid, carbon monoxide - carbon dioxide)

11. Toxicological information

11.1 Acute toxicity:

flonicamid 50% WG

LD50 oral rat : > 2000 mg/kg
LD50 dermal rat : > 2000 mg/kg
LD50 dermal rabbit : N.D. mg/kg
LC50 inhalation rat : > 5.36 mg/l/4 h
LC50 inhalation rat : N.D. ppm/4 h

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11.2 Chronic toxicity:

EC carc. cat.	:	not listed
EC muta. cat.	:	not listed
EC repr. cat.	:	not listed
Carcinogenicity (TLV)	:	not listed
Carcinogenicity (MAC)	:	not listed
Carcinogenicity (VME)	:	not listed
Carcinogenicity (GWBB)	:	not listed
Carcinogenicity (MAK)	:	not listed
Mutagenicity (MAK)	:	not listed
Teratogenicity (MAK)	:	not listed
IARC classification	:	not listed

11.3 Routes of exposure: ingestion, inhalation, eyes and skin

11.4 Acute effects/symptoms:

- Unlikely to cause harmful effects

11.5 Chronic effects:

- Not listed in carcinogenicity class (IARC, EC, TLV, MAK)
- Not listed in mutagenicity class (EC, MAK)
- Not classified as toxic to reproduction (EC)
- Unlikely to cause harmful effects

12. Ecological information

12.1 Ecotoxicity:

flonicamid 50% WG:		
- LC50 (96 h)	:	> 100 mg/l (SALMO SP.)
- EC50 (48 h)	:	> 100 mg/l (DAPHNIA MAGNA)
- E _p C50 (72 h)	:	> 100 mg/l (SELENASTRUM CAPRICORNUTUM)

12.2 Mobility:

- Volatile organic compounds (VOC): N.D. %
- Soluble in water

For other physicochemical properties see heading 9

12.3 Persistence and degradability:

- biodegradation BOD ₅	:	N.D.	% ThOD
- water	:	-	Not readily biodegradable in water
- soil	:	T ½: > 7	days

12.4 Bioaccumulative potential:

- log P_{ow} : 0.3
- BCF : N.D.
- Slightly or not bioaccumulative

12.5 Other adverse effects:

- WGK : 1 (Classification based on the components in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 17 May 1999)
- Effect on the ozone layer : Not dangerous for the ozone layer (1999/45/EC)
- Greenhouse effect : no data available
- Effect on waste water purification : no data available

13. Disposal considerations

13.1 Provisions relating to waste:

- Waste material code (75/442/EEC, Council Decision 2001/118/EC, O.J. L47 of 16/2/2001): 07 04 99 (wastes not otherwise specified)
- Waste material code (Flanders): 035
- Hazardous waste (91/689/EEC)

13.2 Disposal methods:

- Dissolve or mix with a combustible solvent
- Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber
- Do not discharge into drains or the environment

13.3 Packaging/Container:

- Waste material code packaging (75/442/EEC, Council Decision 2001/118/EC, O.J. L47 of 16/2/2001): 15 01 02 (plastic packaging)

14. Transport information

- 14.1 Classification of the substance in compliance with UN Recommendations
UN number : -
CLASS :
SUB RISKS :
PACKING :
PROPER SHIPPING NAME :
- 14.2 ADR (transport by road)
CLASS : NOT APPLICABLE
PACKING :
CLASSIFICATION CODE :
DANGER LABEL TANKS :
DANGER LABEL PACKAGES :
- 14.3 RID (transport by rail)
CLASS : NOT APPLICABLE
PACKING :
CLASSIFICATION CODE :
DANGER LABEL TANKS :
DANGER LABEL PACKAGES :
- 14.4 ADN (transport by inland waterways)
CLASS : NOT APPLICABLE
PACKING :
CLASSIFICATION CODE :
DANGER LABEL TANKS :
DANGER LABEL PACKAGES :
- 14.5 IMDG (maritime transport)
CLASS : NOT APPLICABLE
SUB RISKS :
PACKING :
MFAG :
EMS :
MARINE POLLUTANT :
- 14.6 ICAO (air transport)
CLASS : NOT APPLICABLE
SUB RISKS :
PACKING :
PACKING INSTRUCTIONS PASSENGER AIRCRAFT :
PACKING INSTRUCTIONS CARGO AIRCRAFT :
- 14.7 Special precautions in connection with transport : not restricted for any mode of international transport

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15. Regulatory information

Classification according to directives 67/548/EEC and 1999/45/EC

NOT APPLICABLE

16. Other information

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

N.A. = NOT APPLICABLE
N.D. = NOT DETERMINED
(*) = INTERNAL CLASSIFICATION (NFPA)

Exposure limits:

TLV : Threshold Limit Value - ACGIH USA 2003
OES : Occupational Exposure Standards - United Kingdom 2003
MEL : Maximum Exposure Limits - United Kingdom 2003
MAK : Maximale Arbeitsplatzkonzentrationen - Germany 2002
TRK : Technische Richtkonzentrationen - Germany 2002
MAC : Maximale aanvaarde concentratie - The Netherlands 2003
VME : Valeurs limites de Moyenne d'Exposition - France 1999
VLE : Valeurs limites d'Exposition à court terme - France 1999
GWBB : Grenswaarde beroepsmatige blootstelling - Belgium 2002
GWK : Grenswaarde kortstondige blootstelling - Belgium 2002
EC : Indicative occupational exposure limit values - directive 2000/39/EC

I : Inhalable fraction = **T**: Total dust = **E**: Einatembarer Aerosolanteil
R : Respirable fraction = **A**: Alveolengängiger Aerosolanteil/Alveolar dust
C : Ceiling limit

a:	aerosol	r:	rook/Rauch	(fume)
d:	damp (vapour)	st:	stof/Staub	(dust)
du:	dust	ve:	vezel	(fibre)
fa:	Faser (fibre)	va:	vapour	
fi:	fibre	om:	oil mist	
fu:	fume	on:	olienevel/Ölnebel	(oil mist)
p:	poussière (dust)	part:	particles	

Chronic toxicity:

K : List of the carcinogenic substances and processes - The Netherlands 2003

Full text of any R-phrases referred to under heading 2:

R22 : Harmful if swallowed