IKF-5411 400SC

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Date of issue: 2/7/2018 Revision date: 8/19/2019 Supersedes: 2/7/2018 Version: 2.0

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

1.1. Product identifier

Product form : Mixture

Trade name : KENJA, KRYOR, ZENBY

Product code : IKF-5411 400SC, IBE 4022

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 : Fungicide

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]

Aquatic Chronic 2 H411

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

Adverse physicochemical, human health and environmental effects

Toxic to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS09

Signal word (CLP) : -

Hazard statements (CLP) : H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) : P273 - Avoid release to the environment.
P391 - Collect spillage.
P501 - Dispose of contents and container to a hazardous or special waste collection point.

EUH-statements : EUH401 - To avoid risks to human health and the environment, comply with the instructions for use.
EUH208 - Contains 1,2-benzisothiazol-3(2H)-one(2634-33-5). May produce an allergic reaction.

2.3. Other hazards

No additional information available

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]
Isofetamid	(CAS-No.) 875915-78-9	25 - 50	Aquatic Chronic 2, H411
Ethoxylated polyarylphenol	(CAS-No.) 99734-09-5	1 - 2	Aquatic Chronic 3, H412
Alkylated naphthalene sulfonate sodium salt	(CAS-No.) 68425-94-5	1 - 2	Eye Irrit. 2, H319

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

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 : 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. Consult an eye specialist if necessary.

First-aid measures after ingestion : Rinse mouth out with water. Never give anything by mouth to an unconscious person. Do not induce vomiting. Obtain emergency medical attention.

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

Symptoms/effects : None known.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Powder BC. Polyvalent foam. Carbon dioxide (CO2).

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon oxides (CO, CO2). Nitrogen oxides. Sulphur oxides.

5.3. Advice for firefighters

Firefighting instructions : Prevent fire fighting water from entering the environment.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Put on breathing apparatus. Full protective flameproof clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Mark the danger area. Do not get in eyes, on skin, or on clothing. Mechanically ventilate the spillage area.

6.1.2. For emergency responders

Protective equipment : Concerning personal protective equipment to use, see section 8.

6.2. Environmental precautions

Contain the spilled material by bunding. Do not allow to enter drains or water courses.

6.3. Methods and material for containment and cleaning up

For containment : Take up liquid spill into absorbent material, e.g.: sand/earth. Put into a labelled container and provide safe disposal.

Methods for cleaning up : Wash contaminated area with large amounts of water.

Other information : Recover the cleaning water for later disposal.

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 : Provide local exhaust or general room ventilation. Do not breathe vapours.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. If on skin, take off contaminated clothing.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store tightly closed in a dry and cool place. Protect from heat and direct sunlight. Protect from freezing.

Special rules on packaging : Store in original container.

Packaging materials : Polyethylene terephthalate (PET). Polyethylene (high density).

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls:

Provide local exhaust or general room ventilation.

Hand protection:
Protective gloves. The protective gloves to be used must comply with the specifications of the regulation 2016/425 and the resultant standard EN 374. Breakthrough time : refer to the recommendations of the supplier

Eye protection:
Safety glasses with side shields. Face shield

Skin and body protection:
Complete protective clothing

Respiratory protection:
Self-contained breathing apparatus

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Suspension.
Colour	: Off-white.
Odour	: odourless.
Odour threshold	: No data available
pH	: 7.3 (20 °C)
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 99 °C
Flash point	: > 99 °C (Test method EU A.9)
Auto-ignition temperature	: > 400 °C (Test method EU A.15)
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 1.1 (20 °C) (OECD 109 method)
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 50 - 1800 mPa·s (40 °C)
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

Stable in use and storage conditions as recommended in item 7.

10.3. Possibility of hazardous reactions

None to our knowledge.

10.4. Conditions to avoid

Heat and ignition sources.

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)

IKF-5411 400SC	
LD50 oral rat	> 2000 mg/kg bodyweight (OECD 423 method)
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402 method)
LC50 inhalation rat (mg/l)	> 5.13 mg/l/4h (OECD 436 method)

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)
pH: 7.3 (20 °C)

Additional information : (OECD 404 method)

Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met)
pH: 7.3 (20 °C)

Additional information : (OECD 405 method)

Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met)

Additional information : (OECD 429 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)

Isofetamid (875915-78-9)	
NOAEL (chronic, oral, animal/male, 2 years)	210 mg/kg bw/day (OECD 451 method)
NOAEL (chronic, oral, animal/female, 2 years)	210 mg/kg bw/day (OECD 451 method)

Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)

Isofetamid (875915-78-9)	
NOAEL (animal/male, F0/P)	5.76 mg/kg bw/day (OECD 416 method)
NOAEL (animal/male, F1)	57.1 mg/kg bw/day (OECD 416 method)
NOAEL, oral, rat, male	57.1 mg/kg bw/day (OECD 416 method)
NOAEL maternal/Developmental toxicity, oral, rat, female	300 mg/kg bw/day (OECD 414 method)
NOAEL, maternal/Developmental toxicity, oral, rabbit, female	100 mg/kg bw/day (OECD 414 method)

STOT-single exposure : Not classified (Based on available data, the classification criteria are not met)

STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)

Isofetamid (875915-78-9)	
LOAEL (oral, rat, 90 days)	68.9 mg/kg bw/day (OECD 408 method)
NOAEL (oral, rat, 90 days)	6.65 mg/kg bw/day (OECD 408 method)
NOAEL, Dermal, rat	≥ 1000 mg/kg bw/day (28 days, OECD 410 method)
LOAEL, Dermal, rat	> 1000 mg/kg bw/day (28 days, OECD 410 method)

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

SECTION 12: Ecological information

12.1. Toxicity

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

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

Not rapidly degradable

IKF-5411 400SC	
LC50 fish	31 mg/l (96 Hours) (Oncorhynchus mykiss (Rainbow trout)) (OECD 203 method)
EC50 Daphnia 1	25 mg/l (48 Hours) (Daphnia magna) (OECD 202 method)
ErC50 (algae)	940 mg/l (96 Hours) (Pseudokirchneriella subcapitata) (OECD 201 method)
NOEC chronic algae	10 mg/l (96 Hours) (Pseudokirchneriella subcapitata) (OECD 201 method)

Isofetamid (875915-78-9)	
LC50 fish	2.27 mg/l (96 Hours) (Oncorhynchus mykiss (Rainbow trout)) (OECD 203 method)
EC50 Daphnia 1	4.7 mg/l (48 Hours) (Daphnia magna) (OECD 202 method)
ErC50 (algae)	> 4.3 mg/l (96 Hours) (Pseudokirchneriella subcapitata) (OECD 201 method)
NOEC chronic fish	0.18 mg/l (33 days) (Pimephales promelas) (OECD 210 method)
NOEC chronic crustacea	0.81 mg/l (21 days) (Daphnia magna) (OECD 211 method)

12.2. Persistence and degradability

IKF-5411 400SC	
Persistence and degradability	Not readily biodegradable.

Isofetamid (875915-78-9)	
Persistence and degradability	Not readily biodegradable.
Biodegradation	< 1 % (OECD 301F method)

12.3. Bioaccumulative potential

IKF-5411 400SC	
Bioaccumulative potential	Not potentially bioaccumulable.

Isofetamid (875915-78-9)	
Log Pow	2.5 (40 °C) (99.9 % m/m) (OECD 117 method)
Bioaccumulative potential	Not potentially bioaccumulable.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Additional information : Do not discharge the product into the environment

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of in accordance with relevant local regulations. Incinerate at a licensed installation.

Product/Packaging disposal recommendations : Completely empty the packaging prior to decontamination. Do not re-use empty containers.

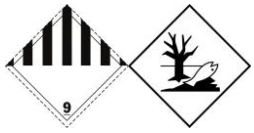
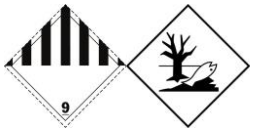
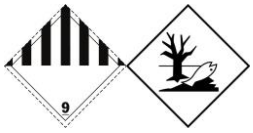
Ecology - waste materials : Do not discharge into drains or rivers.

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
UN 3082	UN 3082	UN 3082	UN 3082	UN 3082
14.2. UN proper shipping name				
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Isofetamid ; Ethoxylated polyarylphenol)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Isofetamid ; Ethoxylated polyarylphenol)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Isofetamid ; Ethoxylated polyarylphenol)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Isofetamid ; Ethoxylated polyarylphenol)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Isofetamid ; Ethoxylated polyarylphenol)

14.3. Transport hazard class(es)

9	9	9	9	9
				

14.4. Packing group

III	III	III	III	III

14.5. Environmental hazards

Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes

No supplementary information available

14.6. Special precautions for user

Overland transport

Classification code (ADR)	: M6
Special provisions (ADR)	: 274, 335, 375, 601
Limited quantities (ADR)	: 5l
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC03, LP01, R001
Special packing provisions (ADR)	: PP1
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T4
Portable tank and bulk container special provisions (ADR)	: TP1, TP29
Tank code (ADR)	: LGBV
Vehicle for tank carriage	: AT
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V12
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV13
Hazard identification number (Kemler No.)	: 90
Orange plates	: 

Transport by sea

Special provisions (IMDG)	: 274, 335, 969
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P001, LP01
Special packing provisions (IMDG)	: PP1
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP2, TP29
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-F
Stowage category (IMDG)	: A
MFAG-No	: 171

Air transport

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y964
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 964
PCA max net quantity (IATA)	: 450L

CAO packing instructions (IATA)	: 964
CAO max net quantity (IATA)	: 450L
Special provisions (IATA)	: A97, A158, A197
ERG code (IATA)	: 9L

Inland waterway transport

Classification code (ADN)	: M6
Special provisions (ADN)	: 274, 335, 375, 601
Limited quantities (ADN)	: 5 L
Excepted quantities (ADN)	: E1
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP
Number of blue cones/lights (ADN)	: 0

Rail transport

Classification code (RID)	: M6
Special provisions (RID)	: 274, 335, 375, 601
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P001, IBC03, LP01, R001
Special packing provisions (RID)	: PP1
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T4
Portable tank and bulk container special provisions (RID)	: TP1, TP29
Tank codes for RID tanks (RID)	: LGBV
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W12
Special provisions for carriage - Loading, unloading and handling (RID)	: CW13, CW31
Colis express (express parcels) (RID)	: CE8
Hazard identification number (RID)	: 90

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.
Substance(s) are not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out
Not subject

SECTION 16: Other information

Indication of changes:
This sheet was updated (refer to the date at the top of this page). SDS changed sections : 3.

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
EC50	Median effective concentration

LC50	Median lethal concentration
LD50	Median lethal dose
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LOAEL	Lowest Observed Adverse Effect Level
Log Pow	n-octanol/water partition coefficient
NOAEL	No-Observed Adverse Effect Level
PBT	Persistent Bioaccumulative Toxic
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
vPvB	Very Persistent and Very Bioaccumulative

Data sources : SDS of suppliers. Peer Review - European Food Safety Authority (EFSA).

Full text of H- and EUH-statements:	
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH208	Contains 1,2-benzisothiazol-3(2H)-one(2634-33-5). 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]:		
Aquatic Chronic 2	H411	Calculation method

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.