

# SAFETY DATA SHEET

Version: 2.0 Date: 06/12/2019

## Acriflavine



ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

<b>1.1 Product identifier</b>	
Product Name	Acriflavine
Product code	EA0022 & EA0023
<b>1.2 Relevant identified uses of the substance or mixture and uses advised against</b>	
Identified Use(s)	Medication for Koi carp
Uses Advised Against	Only to be used with Koi
<b>1.3 Details of the supplier of the safety data sheet</b>	
Company Identification	Evolution Aqua Ltd. Kellet Close, Wigan, Lancashire United Kingdom
Telephone	01942 216 554
Fax	Not available.
E-Mail (competent person)	<a href="mailto:info@evolutionaqua.com">info@evolutionaqua.com</a>
<b>1.4 Emergency telephone number</b>	+44 (0) 1942 216554 (Monday - Friday, GMT 08:30 - 17:00)
Languages spoken	English

### SECTION 2: HAZARDS IDENTIFICATION

<b>2.1 Classification of the substance or mixture</b>	
<b>2.1.1 Regulation (EC) No. 1272/2008 (CLP)</b>	Eye Dam. 1; H318
<b>2.2 Label elements</b>	
Product Name	According to Regulation (EC) No. 1272/2008 (CLP) Acriflavine
Contains:	Acriflavine Hydrochloride
Hazard Pictogram(s)	
Signal Word(s)	DANGER
Hazard Statement(s)	H318: Causes serious eye damage.
Precautionary Statement(s)	P101: If medical advice is needed, have product container or label at hand. P102: Keep out of reach of children. P280: Wear protective gloves/protective clothing/eye protection/face protection. P264: Wash hands and exposed skin thoroughly after handling. 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.
<b>2.3 Other hazards</b>	None known.

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### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances** Not applicable

**3.2 Mixtures** Substances in preparations / mixtures  
EC Classification Regulation (EC) No. 1272/2008 (CLP)

Chemical identity of the substance	%W/W	CAS No.	EC No.	REACH Registration No.	Hazard classification
Acriflavine Hydrochloride	1-2	8063-24-9	617-132-5	Not yet assigned in the supply chain	Acute Tox. 4; H302 Eye Dam. 1; H318 Aq. Chronic 2; H411

For full text of H/P Statements see section 16.

### SECTION 4: FIRST AID MEASURES



#### 4.1 Description of first aid measures

Self-protection of the first aider

Inhalation

Skin Contact

Eye Contact

Ingestion

Wear suitable protective clothing and gloves. Ensure adequate ventilation. Do not breathe vapour. Avoid all contact. Take off immediately all contaminated clothing and wash it before reuse. Do not get in eyes, on skin, or on clothing. Eyewash facilities should be stationed close to workplace where possible.

IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Hold eye open and rinse slowly and gently with water for 15-20 minutes. Get medical attention immediately. Treatment by an ophthalmologist due to possible caustic burn of the eyes may be required.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Get medical advice/attention if you feel unwell.

Causes serious eye damage.

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

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

Treat symptomatically.

IF IN EYES: After rinsing affected eyes must be seen by an ophthalmologist

### SECTION 5: FIRE-FIGHTING MEASURES

#### 5.1 Extinguishing media

Suitable Extinguishing Media

As appropriate for surrounding fire. In case of fire use water spray or fog, alcohol resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing Media

Direct water jet may spread the fire.

#### 5.2 Special hazards arising from the substance or mixture

Combustion may cause toxic fumes. (Carbon monoxide, Carbon dioxide).

#### 5.3 Advice for fire-fighters

Fight fire with normal precautions from a reasonable distance. Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Keep containers cool by spraying with water if exposed to fire. Avoid run off to waterways and sewers.

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### SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1	<b>Personal precautions, protective equipment and emergency procedures</b>	Ensure adequate ventilation. Do not breathe vapour. Avoid all contact. Take off immediately all contaminated clothing and wash it before reuse. Do not get in eyes, on skin, or on clothing. Wear appropriate personal protective equipment, avoid direct contact.
6.2	<b>Environmental precautions</b>	Avoid release to the environment. Do not allow to enter drains, sewers or watercourses.
6.3	<b>Methods and material for containment and cleaning up</b>	Wash away spilled liquid (remainder) with plenty of water. Wipe up remainder then remove to safe place. Wash spill site with water and detergent. Ventilate the area and wash spill site after material pick-up is complete.
6.4	<b>Reference to other sections</b>	See Section: 8, 13

### SECTION 7: HANDLING AND STORAGE

7.1	<b>Precautions for safe handling</b>	Wear appropriate personal protective equipment, avoid direct contact. Do not breathe vapour. Avoid all contact. Take off immediately all contaminated clothing and wash it before reuse. Do not get in eyes, on skin, or on clothing. Wash hands and exposed skin thoroughly after handling. Good hygiene practices and housekeeping measures. Do not eat, drink or smoke during work.
7.2	<b>Conditions for safe storage, including any incompatibilities</b>	Keep container tightly closed and in a well-ventilated place. Keep away from food, drink and animal feeding stuffs. Keep out of reach of children.
	Storage temperature	Keep in a cool, dry place.
	Incompatible materials	None known.
7.3	<b>Specific end use(s)</b>	See Section: 1.2

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1	<b>Control parameters</b>	
8.1.1	<b>Occupational Exposure Limits</b>	Not established.
8.1.2	<b>Biological limit value</b>	Not established.
8.1.3	<b>PNECs and DNELs</b>	Not established.
8.2	<b>Exposure controls</b>	
8.2.1	<b>Appropriate engineering controls</b>	Ensure adequate ventilation. Good hygiene practices and housekeeping measures. A washing facility/water for eye and skin cleaning purposes should be present.
8.2.2	<b>Individual protection measures, such as personal protective equipment (PPE)</b>	Use personal protective equipment as required. Do not breathe vapour. Avoid all contact. Take off immediately all contaminated clothing and wash it before reuse. Do not get in eyes, on skin, or on clothing. Ensure adequate ventilation. Wash hands and exposed skin thoroughly after handling. Do not eat, drink or smoke during work.

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Eye/face protection



Eye Protection: Wear eye protection with side protection (EN166). Have available eyewash bottle with clean water.

Skin protection

Hand protection: Wear impervious gloves (EN374). Breakthrough time of the glove material: refer to the information provided by the gloves' producer. Gloves

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Respiratory protection



Thermal hazards

should be changed if excessive exposure has occurred. Recommended: Nitrile rubber - Minimum thickness: 0.11 mm, breakthrough time: 480 minutes

Body protection: Wear work clothes with long sleeves.

In case of insufficient ventilation, wear suitable respiratory equipment. Respiratory protective equipment should conform to the appropriate EN standard. A suitable dust mask or dust respirator with filter type P (EN143 or EN405) may be appropriate.

Not applicable

### 8.2.3 Environmental Exposure Controls

Avoid release to the environment. Do not allow to enter drains, sewers or watercourses.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance	Yellow/Orange solution
Odour	Not determined
Odour Threshold	Not determined
pH	1.30 Measured neat
Melting Point/Freezing Point	Not determined
Initial boiling point and boiling range	Not determined
Flash Point	Not determined
Evaporation Rate	Not determined
Flammability (solid, gas)	Not determined
Upper/lower flammability or explosive limits	Not determined
Vapour pressure	Not determined
Vapour density (Air = 1)	Not determined
Relative density	Not determined
Solubility(ies)	Not determined
Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature	Not determined
Decomposition Temperature	Not determined
Viscosity	Not determined
Explosive properties	Not explosive
Oxidising properties	Not oxidising

### 9.2 Other information

Not applicable

## SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	Stable under normal conditions.
10.2 Chemical stability	Stable under normal conditions.
10.3 Possibility of hazardous reactions	None known.
10.4 Conditions to avoid	Elevated temperature, Avoid generation of mist. Keep out of reach of children.
10.5 Incompatible materials	None known.
10.6 Hazardous decomposition product(s)	Combustion products: Carbon monoxide, Carbon dioxide

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects (Substances in preparations / mixtures)

#### Acute toxicity - Ingestion

Mixture: Based upon the available data, the classification criteria are not met.

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### Acute toxicity - Inhalation

Acute Toxicity Estimate Mixture Calculation LD50 > 2000 mg/kg bw/day  
Mixture: Based upon the available data, the classification criteria are not met.

### Acute toxicity - Skin Contact

Acute Toxicity Estimate Mixture Calculation LC50 > 5 mg/kg bw/day (Dust)  
Mixture: Based upon the available data, the classification criteria are not met.

### Skin corrosion/irritation

Acute Toxicity Estimate Mixture Calculation LD50 > 2000 mg/kg bw/day  
Mixture: Based upon the available data, the classification criteria are not met.

### Serious eye damage/irritation

Mixture: Eye Dam. 1; H318: Causes serious eye damage.

Acriflavine Hydrochloride

pH: <2

Eye Dam. 1; H318: Causes serious eye damage.

EU classification and labelling inventory (26 Notifiers)

### Respiratory or skin sensitization

Mixture: Based upon the available data, the classification criteria are not met.

### Germ cell mutagenicity

Mixture: Based upon the available data, the classification criteria are not met.

### Carcinogenicity

Mixture: Based upon the available data, the classification criteria are not met.

### Reproductive toxicity

Mixture: Based upon the available data, the classification criteria are not met.

### STOT - single exposure

Mixture: Based upon the available data, the classification criteria are not met.

### STOT - repeated exposure

Mixture: Based upon the available data, the classification criteria are not met.

### Aspiration hazard

Mixture: Based upon the available data, the classification criteria are not met.

### 11.2 Other information

None

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1 Toxicity

Based upon the available data, the classification criteria are not met.

### 12.2 Persistence and degradability

Estimated LC50 (96 hour) > 100 mg/l (Fish)

Acriflavine Hydrochloride

No data for the mixture as a whole.

### 12.3 Bioaccumulative potential

No data

Acriflavine Hydrochloride

No data for the mixture as a whole.

### 12.4 Mobility in soil

No data

Acriflavine Hydrochloride

No data for the mixture as a whole.

### 12.5 Results of PBT and VPVB assessment

No data

None of the substances in this product fulfil the criteria for being regarded as a PBT or vPvB substance.

### 12.6 Other adverse effects

None known

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

Avoid release to the environment. Liquid product may not be disposed of with household waste or landfilled. Do not allow to enter into drains/waters or in the soil. Dispose of this material and its container as hazardous waste. Containers of this material may be hazardous when empty since they retain product residue.

### 13.2 Additional Information

Disposal should be in accordance with local, state or national legislation.

## SECTION 14: TRANSPORT INFORMATION

Not classified according to the United Nations 'Recommendations on the Transport of Dangerous Goods'.

	ADR/RID	IMDG	IATA/CAO
14.1 UN number	Not classified.	Not classified.	Not classified.
14.2 UN proper shipping name	Not classified.	Not classified.	Not classified.
14.3 Transport hazard class(es)	Not classified.	Not classified.	Not classified.
14.4 Packing group	Not classified.	Not classified.	Not classified.
14.5 Environmental hazards	Not classified.	Not classified.	Not classified.
14.6 Special precautions for user	See Section: 2		
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.	Not applicable.	Not applicable.
14.8 Additional Information	None.		

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### SECTION 15: REGULATORY INFORMATION

15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture	
15.1.1	EU regulations	
	Authorisations and/or Restrictions On Use	Not restricted
15.1.2	National regulations	None known.
15.2	Chemical Safety Assessment	A chemical safety assessment is not required under REACH.

### SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: V2.0  
Sections indicated with the following have been revised

**References:** Safety Data Sheets for ingoing ingredients. EU classification and labelling inventory: Acriflavine Hydrochloride (CAS No. 8063-24-9)

EU Classification: This Safety Data Sheet was prepared in accordance with EC Regulation (EC) 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830.

Classification of the substance or mixture According to Regulation (EC) No. 1272/2008 (CLP).	Classification Procedure
Eye Dam. 1; H318	Test Result (pH <2 (Measured neat))

#### LEGEND

LTEL	Long Term Exposure Limit
STEL	Short Term Exposure Limit
DNEL	Derived No Effect Level
PNEC	Predicted No Effect Concentration
PBT	PBT: Persistent, Bioaccumulative and Toxic
vPvB	vPvT: very Persistent and very Toxic
OECD	Organisation for Economic Cooperation and Development
LOAEC	Lowest observed adverse effect concentration
NOAEL	No Observed Adverse Effect Level
NOAEC	no observed adverse effect concentration

#### Hazard classification / Classification code:

Acute Tox. 4; Acute toxicity, Category 4  
Eye Dam.1; Serious eye damage/irritation, Category 1  
Eye Irrit. 2; Eye Irritation, Category 2  
Aquatic Chronic 2; Hazardous to the aquatic environment, Chronic , Category 2

#### Hazard Statement(s)

H332: Harmful if inhaled.  
H318: Causes serious eye damage.  
H319: Causes serious eye irritation.  
H411: Toxic to aquatic life with long lasting effects.

Training advice: Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required.

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