

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Issue date: 13/04/2021
Revision date: 13/04/2021
Version: 1.0

Acriflavine

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

1.1. Product identifier

Product form	: Substance
Trade name	: Acriflavine
CAS-No.	: 8048-52-0
Product code	: I-21.140serie
Formula	: C ₁₄ H ₁₄ ClN ₃
Synonyms	: 3,6-Diamino-10-methylacridinium chloride; Euflavine; Acriflavine base

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

1.2.1. Relevant identified uses

Main use category : Laboratory chemicals

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Interchema BV
De Hagen 12
8325 DB Vollenhove - Nederland
T +31881885566
interchema@antonides.com - www.interchema.nl

1.4. Emergency telephone number

Emergency number : 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Acute toxicity (oral), Category 4	H302
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	H335

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) :

Warning

Hazard statements (CLP) :

H302 - Harmful if swallowed.
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.



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Precautionary statements (CLP) : P261 - Avoid breathing dust, spray, fume, mist, gas, vapours.
P280 - Wear protective gloves, protective clothing, eye protection, face protection.
P301+P312 - IF SWALLOWED: Call doctor, a POISON CENTER if you feel unwell.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
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 doctor, a POISON CENTER.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Acriflavine	(CAS-No.) 8048-52-0	> 95	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335

Full text of H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

First-aid measures after inhalation : If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

First-aid measures after skin contact : Remove contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a doctor.

First-aid measures after eye contact : Flood the eye with plenty of water for a few minutes, holding the eyelids open. Remove contact lenses. Consult an eye-doctor.

First-aid measures after ingestion : DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

Symptoms/effects after inhalation : May cause respiratory irritation.

Symptoms/effects after skin contact : May cause skin irritation.

Symptoms/effects after eye contact : May cause eye irritation.

Symptoms/effects after ingestion : Harmful if swallowed.

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. Carbon dioxide (CO₂). Dry chemical. chemical foam. Closed containers close to the fire cool with water spray.

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Unsuitable extinguishing media : Water (quick-acting extinguisher, reel); risk of puddle expansion.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Carbon oxides (CO, CO₂), nitrogen oxides (NO_x), hydrogen chloride.

5.3. Advice for firefighters

Precautionary measures fire : As with any fire, use self-contained breathing apparatus, operating under pressure, approved by MSHA / NIOSH, or wearing equivalent and full protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Ensure adequate air ventilation. Use personal protective equipment as required.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

6.1.2. For emergency responders

Protective equipment : Wear recommended personal protective equipment.

6.2. Environmental precautions

See section 12 for additional ecological information.

6.3. Methods and material for containment and cleaning up

For containment : Sweep up and take off. In suitable containers for disposal. Do not allow this chemical to enter the environment coming.

6.4. Reference to other sections

See protective measures in sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes. Do not breathe dust. Do not eat, drink or smoke when using this product.

Hygiene measures : Observe normal hygiene standards.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in tightly closed containers in cool, dry, isolated, well-ventilated area. Containers which are opened should be properly resealed and kept upright to prevent leakage.

Information on mixed storage : KEEP SUBSTANCE AWAY FROM: Oxidisable materials.

7.3. Specific end use(s)

Laboratory use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls:

Use in accordance with current rules and practices with regard to industrial hygiene and safety. Wash hands at work breaks and at the end of the workday. Ensure good ventilation of the work station.

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Hand protection:

Protective gloves against chemicals (EN 374). Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Gloves must be replaced after each use and whenever signs of wear or perforation appear. Observe the regulations regarding permeability and breakthrough time, as provided by the supplier of the gloves. (Consult manufacturer / supplier for information).

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR), Neoprene rubber (HNBR), Natural rubber, Polyvinylchloride (PVC)	Contact supplier if guidance is required			EN ISO 374

Eye protection:

Safety glasses (EN 166)

Type	Field of application	Characteristics	Standard
Safety glasses	Dust, Fine dust		EN 166

Respiratory protection:

When workers are exposed to concentrations above the exposure limit, they must wear appropriate, approved respiratory protective equipment. To protect the wearer, respiratory protection must be properly fitted and used and maintained properly

Personal protective equipment symbol(s):



Thermal hazard protection:

Required in the case of fire, see section 5.

Environmental exposure controls:

No information available.

Other information:

Do not eat, drink or smoke when using this product. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Powder.
Molecular mass	: 469.03 g/mol
Colour	: amber.
Odour	: odourless.
Odour threshold	: No data available
pH	: 3.5
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 179 – 181 °C
Freezing point	: No data available

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Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

Hazardous polymerization does not occur.

10.4. Conditions to avoid

Incompatible materials:

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO₂). nitrogen oxides (NO_x). hydrogen chloride.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Harmful if swallowed.
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Causes skin irritation. pH: 3.5
Serious eye damage/irritation	: Causes serious eye irritation. pH: 3.5
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: This product does not contain any substances known to be carcinogenic
Reproductive toxicity	: Not classified

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STOT-single exposure : May cause respiratory irritation.
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Do not empty into drains.
Hazardous to the aquatic environment, short-term (acute) : Not classified
Hazardous to the aquatic environment, long-term (chronic) : Not classified

12.2. Persistence and degradability

Acriflavine (8048-52-0)

Persistence and degradability	Not readily biodegradable in the soil. Not readily biodegradable in water.
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12.3. Bioaccumulative potential

Acriflavine (8048-52-0)

Bioaccumulative potential	Unlikely (1).
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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

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.
Waste treatment methods : Waste is classified as hazardous. Dispose of in accordance with the European Directives for waste and hazardous waste. Dispose of according to local regulations.
Product/Packaging disposal recommendations : Contaminated packaging: remove as unused product.

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated



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14.4. Packing group

Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
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14.5. Environmental hazards

Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
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No supplementary information available

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

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

No REACH Annex XVII restrictions

Acriflavine is not on the REACH Candidate List

Acriflavine is not on the REACH Annex XIV List

Acriflavine is not 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.

Acriflavine is not 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

Germany

Regulatory reference : Not classified according to Regulation Governing Systems for Handling Substances Hazardous to Waters (AwSV)

Employment restrictions : Observe restrictions according Act on the Protection of Working Mothers (MuSchG)
Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG)

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

Dutch National Regulations : Observe Directive 92/85 / EC: Protection of pregnant and breastfeeding women.

Take note of Directive 94/33 / EC on the protection of young people at the workplace.

ABM category : A(4) - low hazard for aquatic organisms, may have longterm hazardous effects in aquatic environment

SZW list of carcinogens : The substance is not listed

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SZW list of mutagenic substances : The substance is not listed

NON-limitative list of substances toxic to reproduction - Breastfeeding : The substance is not listed

NON-exhaustive list of substances toxic to reproduction - Fertility : The substance is not listed

NON-exhaustive list of substances toxic to reproduction - Development : The substance is not listed

Denmark

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

Switzerland

Storage class (LK) : LK 10/12 - Liquids

15.2. Chemical safety assessment

A chemical safety assessment / reporting (CSA / CSR) has not been performed

SECTION 16: Other information

Abbreviations and acronyms:

EC-No.	European Community number
EU	European Union
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
CAS-No.	Chemical Abstract Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
EHBO	First aid
EN	European Norm
pH	potential of hydrogen
STOT	Specific Target Organ Toxicity
PBT	Persistent Bioaccumulative Toxic
vPvB	Very Persistent and Very Bioaccumulative
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
IMDG	International Maritime Dangerous Goods
IATA	International Air Transport Association
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SZW	Ministry of Social Affairs and Employment

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. Supplier's safety documents.

Training advice : Chemical risk awareness training including labeling, safety data sheets, personal protective equipment and hygiene, use of personal protective equipment including selection of appropriate protective equipment, compatibility, breakthrough times, care, maintenance, fit and EN standards. chemicals, including the use of eyewash and emergency showers Training on how to handle chemical incidents.

Other information : The classification is in accordance with ATP12 (adaption to technical and scientific progress).
Physical hazards: On basis of test data;
Health hazards: Calculation method; Environmental hazards: Calculation method.



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Full text of H- and EUH-statements:	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

Disclaimer:

The contents of this material safety data sheet is composed with the utmost care from the currently available information from our suppliers. It is expected to be correct, but should be used exclusively as a guideline.

It describes the product in relation to the appropriate precautions. It cannot guarantee the properties of the product. Antonides C.V. will not be responsible for any damage, in any way, that could result from the use of this data.

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