

Safety Data Sheet

according to UK REACH Regulation

Auramine-Rhodamine Solution

Revision date: 08.03.2024

Product code: 12907.xxxxx

Page 1 of 11

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Auramine-Rhodamine Solution

UFI: J4R4-V1H3-700S-NJHS

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

Use as laboratory reagent. The product is intended for research, analysis and scientific education.

Uses advised against

Any non-intended use.

1.3. Details of the supplier of the safety data sheet

Company name:	MORPHISTO GmbH	
Street:	Schumannstr. 144	
Place:	D-63069 Offenbach	
Telephone:	+49 (0) 69 / 400 3019-60	Telefax: +49 (0) 69 / 400 3019-64
E-mail:	info@morphisto.de	
Contact person:	Morphisto GmbH	
E-mail:	gefahrstoffmanagement@morphisto.de	
Internet:	http://www.morphisto.de	

1.4. Emergency telephone number:

Morphisto GmbH, Tel: +49(0)69 400 3019-60, Mo-Fr.: 09-16 Uhr

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****GB CLP Regulation**

This mixture is not classified as hazardous in accordance with GB CLP Regulation.

Contrary to the harmonized classification, the AGS rates the substance auramine it contains as carc. 1B, resulting in the mixture being classified/labeled as Carc. 1B would lead. See also section 15.1.

2.2. Label elements**GB CLP Regulation****Special labelling of certain mixtures**

EUH210 Safety data sheet available on request.

2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulating and toxic (PBT) or very persistent and very bioaccumulating (vPvB) at levels of 0.1% or higher. Ecological information: The substance/mixture does not contain any components that are considered to be hazardous according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in amounts of 0.1 % or more have endocrine disrupting properties. Toxicological information: The substance/mixture does not contain any components that are to be classified according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in quantities of 0.1 % or more have endocrine disrupting properties.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Chemical characterization**
wässrige Lösung

Safety Data Sheet

according to UK REACH Regulation

Auramine-Rhodamine Solution

Revision date: 08.03.2024

Product code: 12907.xxxxx

Page 2 of 11

Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
2465-27-2	Auramine O			< 1 %
	219-567-2	612-097-00-2		
	Carc. 2, Acute Tox. 4, Eye Irrit. 2, Aquatic Chronic 2; H351 H302 H319 H411			

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
2465-27-2	219-567-2	Auramine O	< 1 %
	dermal: LD50 = 300 mg/kg; oral: LD50 = 480 mg/kg		

Further Information

This product contains no substances of very high concern (SVHC) (>0,1%) which are included in the Candidate List according to Article 59 of REACH.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

Provide fresh air. Put victim at rest, cover with a blanket and keep warm. In case of breathing difficulties administer oxygen. In case of irregular breathing or respiratory arrest provide artificial respiration.

After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse. Beschmutzte, getränkte Kleidung sofort ausziehen. Bei Hautreizungen Arzt aufsuchen. After contact with skin, wash immediately with: Water.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

After ingestion

Observe risk of aspiration if vomiting occurs. Rinse mouth thoroughly with water. Call a physician immediately. Let water be drunk in little sips (dilution effect). Do NOT induce vomiting.

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

No information available.

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

Co-ordinate fire-fighting measures to the fire surroundings. The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

High power water jet.

Safety Data Sheet

according to UK REACH Regulation

Auramine-Rhodamine Solution

Revision date: 08.03.2024

Product code: 12907.xxxxx

Page 3 of 11

5.2. Special hazards arising from the substance or mixture

Non-flammable. In case of fire may be liberated: Carbon monoxide Carbon dioxide (CO₂). Nitrogen oxides (NO_x)

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures****General advice**

Remove persons to safety.
Provide adequate ventilation.
Wear personal protection equipment. (See section 8.)

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Discharge into the environment must be avoided.

6.3. Methods and material for containment and cleaning up**For cleaning up**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).
Treat the recovered material as prescribed in the section on waste disposal.
Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Wear suitable protective clothing. (See section 8.)
Provide adequate ventilation as well as local exhaust at critical locations.
Use extractor hood (laboratory).

Advice on protection against fire and explosion

No special fire protection measures are necessary.

Advice on general occupational hygiene

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat, drink, smoke, sniff. Always close containers tightly after the removal of product. Remove contaminated clothing immediately and dispose off safely. Wash contaminated clothing prior to re-use. Used working clothes should not be worn outside the work area. Street clothing should be stored separately from work clothing.

Further information on handling

Do not use for injecting or spraying.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed.

Hints on joint storage

Do not store together with: Explosives. Oxidizing solids. Oxidizing liquids. Infectious substances. Radioactive

Safety Data Sheet

according to UK REACH Regulation

Auramine-Rhodamine Solution

Revision date: 08.03.2024

Product code: 12907.xxxxx

Page 4 of 11

substances.

Gases under pressure. Peroxides. ammonium nitrate. Food and fodder

Further information on storage conditions

Keep/Store only in original container. Store small packages in a suitable, robust cabinet.

storage temperature: 15-25 °C

7.3. Specific end use(s)

Use as laboratory reagent. The product is intended for research, analysis and scientific education.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
56-81-5	Glycerol, mist	-	10		TWA (8 h)	WEL
108-95-2	Phenol	2	7.8		TWA (8 h)	WEL
		4	16		STEL (15 min)	WEL

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
56-81-5	Glycerol			
	Worker DNEL, long-term	inhalation	local	56 mg/m ³
108-95-2	hydroxybenzene			
	Worker DNEL, long-term	inhalation	systemic	8 mg/m ³

PNEC values

CAS No	Substance	Value
	Environmental compartment	
108-95-2	hydroxybenzene	
	Freshwater	0,0077 mg/l
	Marine water	0,00077 mg/l
	Freshwater sediment	0,0915 mg/kg
	Marine sediment	0,00915 mg/kg
	Micro-organisms in sewage treatment plants (STP)	2,1 mg/l
	Soil	0,136 mg/kg

Additional advice on limit values

To date, no national critical limit values exist.

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation as well as local exhaust at critical locations. Use extractor hood (laboratory).

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye/face protection. Wear safety glasses; chemical goggles (if splashing is possible).

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is

Safety Data Sheet

according to UK REACH Regulation

Auramine-Rhodamine Solution

Revision date: 08.03.2024

Product code: 12907.xxxxx

Page 5 of 11

recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Pull-over gloves of rubber. EN ISO 374

Suitable material:

(penetration time (maximum wearing period): \geq 8 Stunden):

CR (polychloroprenes, Chloroprene rubber). (0,5 mm)

NBR (Nitrile rubber). (0,35 mm)

FKM (fluororubber). (0,4 mm)

PVC (Polyvinyl chloride). (0,5 mm)

Butyl rubber. (0,5 mm)

Before using check leak tightness / impermeability. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Skin protection

Use of protective clothing. Suitable protective clothing: Lab apron.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Do not use for injecting or spraying.

Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid	
Colour:	red transparent	
Odour:	not determined	
Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		100 °C
Flammability:		not determined
Lower explosion limits:		2,6 vol. %
Upper explosion limits:		11,3 vol. %
Flash point:		191 °C
Auto-ignition temperature:		370 °C
Decomposition temperature:		not determined
pH-Value (at 20 °C):		2,5-3,5
Viscosity / kinematic:		not determined
Water solubility:		not determined
Solubility in other solvents		not determined
Partition coefficient n-octanol/water:		not determined
Vapour pressure:		23 hPa
(at 20 °C)		
Density (at 20 °C):		1,12 g/cm ³
Relative vapour density:		not determined
Particle characteristics:		not applicable

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

The product is not: Explosive. not determined

Oxidizing properties

not determined

Other safety characteristics

Viscosity / dynamic: not determined

Safety Data Sheet

according to UK REACH Regulation

Auramine-Rhodamine Solution

Revision date: 08.03.2024

Product code: 12907.xxxxx

Page 6 of 11

SECTION 10: Stability and reactivity
10.1. Reactivity

No information available.

10.2. Chemical stability

Stable under normal storage and handling conditions.

10.3. Possibility of hazardous reactions

No information available.

10.4. Conditions to avoid

Keep away from heat.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

 In case of fire may be liberated: Carbon monoxide Carbon dioxide (CO₂). Nitrogen oxides (NO_x)

SECTION 11: Toxicological information
11.1. Information on hazard classes as defined in GB CLP Regulation
Acute toxicity

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

ATEmix calculated

ATE (oral) 23279 mg/kg; ATE (dermal) 153488 mg/kg; ATE (inhalation vapour) 697,7 mg/l; ATE (inhalation dust/mist) 116,3 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
2465-27-2	Auramine O				
	oral	LD50 480 mg/kg	Mouse.	HSDB Toxnet	
	dermal	LD50 300 mg/kg	Mouse.	HSDB Toxnet	

Irritation and corrosivity

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

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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

Contrary to the harmonized classification, the AGS rates the substance auramine it contains as carc. 1B, resulting in the mixture being classified/labeled as Carc. 1B would lead. See also section 15.1.

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

11.2. Information on other hazards
Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

Safety Data Sheet

according to UK REACH Regulation

Auramine-Rhodamine Solution

Revision date: 08.03.2024

Product code: 12907.xxxxx

Page 7 of 11

Other information

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information

12.1. Toxicity

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

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
2465-27-2	Auramine O					
	Acute fish toxicity	LC50	1 mg/l	96 h	Poecilia reticulata (Guppy)	suppliers SDS.
	Acute crustacea toxicity	EC50	3,2 mg/l	48 h	Oryzias latipes (Ricefish)	suppliers SDS.

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
2465-27-2	Auramine O	2,98

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Do not allow uncontrolled discharge of product into the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation. Consult the local waste disposal expert about waste disposal.

List of Wastes Code - residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

List of Wastes Code - used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

Safety Data Sheet

according to UK REACH Regulation

Auramine-Rhodamine Solution

Revision date: 08.03.2024

Product code: 12907.xxxxx

Page 8 of 11

List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information**Land transport (ADR/RID)**

14.1. UN number or ID number: No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

Other applicable information (land transport)

Not restricted

Inland waterways transport (ADN)

14.1. UN number or ID number: No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

Other applicable information (inland waterways transport)

Not restricted

Marine transport (IMDG)

14.1. UN number or ID number: No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

Other applicable information (marine transport)

Not restricted

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

14.7. Maritime transport in bulk according to IMO instruments

No dangerous good in sense of this transport regulation.

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 75

Directive 2010/75/EU on industrial emissions: <1 %

Safety Data Sheet

according to UK REACH Regulation

Auramine-Rhodamine Solution

Revision date: 08.03.2024

Product code: 12907.xxxxx

Page 9 of 11

Directive 2004/42/EC on VOC in
paints and varnishes:
Information according to Directive
2012/18/EU (SEVESO III):

40-60 %

Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Water hazard class (D):

2 - obviously hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 1,2,11,16.

13.07.2013 Rev.1.0 Initial release

Rev. 2,0; 17.07.2023; general adjustment(s)

Rev. 2,1; 08.03.2024; general revision / adjustment section 2.1 und 11.1

Safety Data Sheet

according to UK REACH Regulation

Auramine-Rhodamine Solution

Revision date: 08.03.2024

Product code: 12907.xxxxx

Page 10 of 11

Abbreviations and acronyms

Acute Tox: Acute toxicity
Skin Corr: Skin corrosion
Eye Dam: Eye damage
Eye Irrit: Eye irritation
Muta: Germ cell mutagenicity
Carc: Carcinogenicity
STOT RE: Specific target organ toxicity - repeated exposure
Aquatic Chronic: Chronic aquatic hazard
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)
LC50: Lethal concentration, 50 percent
LD50: Lethal Dosis, 50 percent
CLP: Classification, labelling and Packaging
REACH: Registration, Evaluation and Authorization of Chemicals
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
UN: United Nations
CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration
ATE: Acute toxicity estimate
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
LL50: Lethal loading, 50%
EL50: Effect loading, 50%
EC50: Effective Concentration 50%
ErC50: Effective Concentration 50%, growth rate
NOEC: No Observed Effect Concentration
BCF: Bio-concentration factor
PBT: persistent, bioaccumulative, toxic
vPvB: very persistent, very bioaccumulative
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Regulations concerning the international carriage of dangerous goods by rail
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)
EmS: Emergency Schedules
MFAG: Medical First Aid Guide
MARPOL: International Convention for the Prevention of Marine Pollution from Ships
IBC: Intermediate Bulk Container
VOC: Volatile Organic Compounds
SVHC: Substance of Very High Concern
For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety

Safety Data Sheet

according to UK REACH Regulation

Auramine-Rhodamine Solution

Revision date: 08.03.2024

Product code: 12907.xxxxx

Page 11 of 11

assessment, chapter R.20 (Table of terms and abbreviations).

Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H351	Suspected of causing cancer.
H411	Toxic to aquatic life with long lasting effects.
EUH210	Safety data sheet available on request.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations. Die Angaben stützen sich auf den heutigen Stand unserer Kenntnisse, sie stellen jedoch keine Zusicherung von Produkteigenschaften dar und begründen kein vertragliches Rechtsverhältnis.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material. Bestehende Gesetze und Bestimmungen sind vom Empfänger unserer Produkte in eigener Verantwortung zu beachten.

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)