

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1 Product identifiers

Product name : AQ4  
CAS-No. : 70476-63-0

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

Identified uses : Laboratory chemicals, Manufacture of substances

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Acute toxicity, Oral (Category 4)

Acute aquatic toxicity (Category 1)

Chronic aquatic toxicity (Category 1)

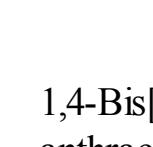
Classification according to EU Directives 67/548/EEC or 1999/45/EC

Harmful if swallowed. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### 2.2 Label elements

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

Pictogram



Signal word

Warning

Hazard statement(s)

Harmful if swallowed.

H430

Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

Avoid release to the environment.

P273

Dispose of contents/ container to an approved waste disposal plant.

P501

none

Supplemental hazard

Statements

According to European Directive 67/548/EEC as amended.

Hazard symbol(s)



R-phrase(s)

Harmful if swallowed.

R22

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R50/53

S-phrase(s)

Do not breathe dust.

S22

This material and its container must be disposed of as hazardous waste.

S60

Avoid release to the environment. Refer to special instructions/ Safety data sheets.

S61

### 2.3 Other hazards - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Synonyms : 1,4-Bis[[2-(dimethylamino)ethyl]amino]-5,8-dihydroxy-9,10-anthracenedione  
1,4-Bis[[2-(dimethylamino)ethyl]amino]-5,8-dihydroxyanthracene-9,10-dione

Formula : C22H28N4O4

Molecular Weight : 412,48 g/mol

Component

Concentration

AQ4

CAS-No. 70476-63-0

-

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Flush eyes with water as a precaution.

#### If swallowed

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

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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

no data available

## 5. FIRE-FIGHTING MEASURES

### 5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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

Carbon oxides, nitrogen oxides (NOx)

### 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

### 5.4 Further information

no data available

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Store with desiccant. Store in cool place.

Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: 2 - 8 °C

### 7.3 Specific end uses

no data available

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

Components with workplace control parameters

### 8.2 Exposure controls

#### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment

##### Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

##### Skin protection

Handle with gloves. 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.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

##### Body Protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

##### Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

a) Appearance Form: solid

b) Odour no data available

c) Odour Threshold no data available

d) pH no data available

e) Melting point/freezing point 165 - 167 °C

f) Initial boiling point and boiling range no data available

g) Flash point no data available

h) Evaporation rate no data available

i) Flammability (solid, gas) no data available

j) Upper/lower flammability or explosive limits no data available

k) Vapour pressure no data available

l) Vapour density no data available

m) Relative density no data available

n) Water solubility no data available

o) Partition coefficient: n-octanol/water log Pow: 4,144

p) Autoignition temperature no data available

q) Decomposition temperature no data available

r) Viscosity no data available

s) Explosive properties no data available

t) Oxidizing properties no data available

### 9.2 Other safety information

no data available

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

no data available

### 10.2 Chemical stability

no data available

### 10.3 Possibility of hazardous reactions

no data available

### 10.4 Conditions to avoid

no data available

### 10.5 Incompatible materials

no data available

### 10.6 Hazardous decomposition products

no data available

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute toxicity

no data available

#### Skin corrosion/irritation

no data available

#### Serious eye damage/eye irritation

no data available

#### Respiratory or skin sensitization

no data available

#### Germ cell mutagenicity

no data available

#### Carcinogenicity

no data available

#### IARC:

No component of this product present at levels greater than IARC or equal to 0.1 % is identified as

carcinogenic to humans.

no data available

#### EUH: