

SAFETY DATA SHEET

According to Regulations
(EC) No. 1272/2008 and (EU) No. 453/2010

Propidium iodide

1. Identification

1.1 Product Identifier

Product Name: Propidium iodide
Product Number: IQP-121

REACH No.: A registration number is not available for this mixture as the mixture or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

CAS No.: Propidiumiodide CAS-No. 2553-16-4

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

Propidium iodide (PI) is a popular red-fluorescent nuclear and chromosome counterstain. Since propidium iodide is not permeant to live cells, it is also commonly used to detect dead cells in a population.

1.3 Details of the supplier of the safety data sheet

Company: IQ PRODUCTS BV
Address: Rozenburglaan 13a
9727 DL GRONINGEN
THE NETHERLANDS
Telephone: +31-50-5757000
Fax: +31-50-5757002
E-mail address: marketing@iqproducts.nl
Website: www.iqproducts.nl

1.4 Emergency telephone numbers

Emergency Phone # 112

2. Hazard Identification

2.1 Classification of the substance or mixture

Skin irritation (Category 2), H315
Eye irritation (Category 2), H319
Germ cell mutagenicity (Category 2), H341
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335
For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Hazard Pictograms (GHS-US):
Signal Word (GHS-US):



Hazard Statements (GHS_US):

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H341 Suspected of causing genetic defects.

Precautionary Statements (GHS-US):

P201 Obtain special instructions before use.

P280 Wear eye protection/ face protection.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

Supplemental Hazard Statements none**2.3 Other Hazards**

All reagents should be handled in accordance with good laboratory practices using appropriate precautions. In addition, handle all patient samples with appropriate precautions as described in "Biosafety in Microbial and Biomedical Laboratories", 2nd ed., 1988. HHS Publication No. (CDC) 88-8395, Centers for Disease Control.

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

3. Composition/Information on ingredients

3.1 Substances

Synonyms : 3,8-Diamino-5-[3-(diethylmethylammonio)propyl]-6-phenylphenanthridinium diiodide

Formula : C₂₇H₃₄I₂N₄

Molecular weight : 668,39 g/mol

CAS-No. : 25535-16-4

EC-No. : 247-081-0

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component Classification Concentration

3,8-Diamino-5-[3-(diethylmethylammonio)propyl]-6-phenylphenanthridinium diiodide

CAS-No.25535-16-4

EC-No.247-081-0

H315, H319,

H335, H341 <= 100 %

4. First-aid Measures

General advice

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

4.1 Description of first aid measures

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

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

Eye Contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Ingestion: 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

The most important known symptoms and effects are described in the labelling (see section 2.2)

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician: All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that over exposure to materials other than this product may have occurred. Also see above under section 4.1.

5. Fire-fighting Measures

5.1 Extinguishing media

Extinguishing Media:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective Equipment:	An approved self-contained breathing apparatus and protective clothing should be used.
Special Fire and Explosion Hazards:	No special hazards determined.

5.2 Special hazards arising from the substance or mixture

Carbon oxides, Nitrogen oxides (NO_x), Hydrogen iodide

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

6. Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, 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.

6.3 Methods and Material 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

All reagents should be handled in accordance with good laboratory practices using appropriate precautions:

- No eating, drinking, or smoking in work areas
- Wash hands after use
- Remove contaminated clothing and protective equipment before leaving work area
- Avoid inhaling, ingesting, and contact with eyes and skin. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

7.2 Conditions for Safe Storage, Including Any Incompatibilities

Product is stable if stored according to appropriate conditions until the expiration date as indicated on the label. Storage conditions recommended: 2 to 8 °C. Protect the product from temperatures above 30°C and from prolonged time at room temperature Do not freeze. Avoid direct sunlight.

7.3 Specific End Use(s)

The intended use is mentioned in section 1.2 no other specific uses are stipulated.

8. Exposure controls/personal protection

8.1 Control parameters

The product does not contain any materials that need to be monitored at the workplace.

8.2 Exposure controls

Universal precautions should be followed when using this product.

Wear appropriate personal protective equipment and follow safe laboratory practices.



Pictograms:

Respiratory: None required when product is used as recommended

Hands: Wear protective gloves according to EN 166

Eye / Face: Wear safety glasses according to EN 374
Skin / Body: impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance:	Liquid, clear, orange/red
b) Odour:	No data available
c) Odour Threshold:	Not applicable
d) pH:	7.3
e) Melting point/freezing point:	No data available
f) Initial boiling point and boiling range:	Not applicable
g) Flash point:	Not applicable
h) Evaporation rate:	No data available
i) Flammability:	No data available
j) Upper/lower Flammability or explosive limits:	No data available
k) Vapour pressure:	Not applicable
l) Vapour density:	Not applicable
m) Relative density:	Not applicable
n) water solubility:	Fully miscible in water
o) Partition coefficient: n-octanol/water:	No data available
p) Auto-ignition temperature:	Not self-igniting data available
q) Decomposition temperature:	Not applicable
r) Viscosity:	No data available
s) Explosive properties:	Product is not explosive
t) Oxidizing properties:	Product is not oxidizing

9.2 Other information

No other information available.

10. Stability and Reactivity

10.1 Reactivity

No known reactivity.

10.2 Chemical Stability

Stable under recommended storage conditions

10.3 Possibility of Hazardous Reactions

No data available.

10.4 Conditions to Avoid

No data available

10.5 Incompatible Materials

Strong oxidizing agents

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/Irritation: No data available

Respiratory or Skin Sensitization: No data available.

Germ cell mutagenicity: In vitro tests showed mutagenic effects

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity: No data available

STOT-single exposure: No data available

STOT-repeated exposure: No data available

Aspiration Hazard: No data available

Toxicity on Repeated Exposure: No toxic effect known.

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

12. Ecological information

12.1 Toxicity

No data available

12.2 Persistence and Degradability

No data available

12.3 Bioaccumulative Potential

No data available

12.4 Mobility in Soil

No data available

12.5 Results of PBT and vPvB Assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other Adverse Effects

No data available

13. Disposal considerations

13.1 Waste treatment methods

Product:

There are no uniform EC regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the EC member countries through corresponding laws and regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste.

Contaminated Packaging:

Disposal in compliance with official regulations. Handle contaminated packaging in the same way as the substance itself. If not officially specified differently, non-contaminated packaging may be treated like household waste or recycled.

14. Transport information

14.1 UN Number

Not determined.

14.2 UN Proper Shipping Name

Not determined.

14.3 Transport Hazard Class

Not determined.

14.4 Packing Group

Not classified.

14.5 Environmental Hazards

Not classified.

14.6 Special Precautions for Users

See subsections 6-8.

14.7 Transport in Bulk According to Annex II of MARPOL73/78 and the IBC Code

This product is provided only in non-bulk containers.

15. Regulatory information

15.1 Safety, health and environmental regulations specific for the substance or mixture

No data available

15.2 Chemical safety assessment

No chemical safety assessment has been carried out.

16. Other information**Changes to the previous version**

This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910:1200 and complies with Regulation (EC) 453/2010.

Literature References

Regulation (EC) No. 1272 / 2008

Regulation (EU) No.453 / 2010

Regulation (EC) No. 1907 / 2006

Disclaimer/Statement of Liability

The information presented in this Safety Data Sheet is based on the present state of our knowledge. The product should be used according to the instructions provided by the manufacturer, see "Instructions for use" as presented in the package insert accompanying every product. We make no warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. The product should be used according to the instructions provided by the manufacturer, see "instructions for use" as presented in the Package Insert accompanying every product. *IQ Products BV* nor any distributors thereof shall not be held liable for any claims, losses, or damages resulting from handling or from contact with the product.

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