

## SAFETY DATA SHEET

According to Regulations  
(EC) No. 1272/2008, (EU) No. 453/2010,  
(EU) No. 2015/830, (EU) 2020/878, (EU) 2024/2865

# IQ Ery Perm Kit

## 1. Identification of the substance/mixture and of the company/undertaking

### 1.1 Product Identifier

**Product Name:** IQ Ery Perm Kit  
**Product code:** IQP-340  
**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.

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

**Intended use:** This product is intended for *fixation and permeabilization of erythrocytes* in order to prepare these cells for (intracellular) staining and subsequent analysis by flow cytometry (for Research Use Only).

**Uses advised against:** Not for use in humans.  
Not for *in vivo* use.  
Not for use other than those indicated above.

### 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  
**E-mail address:** marketing@iqproducts.nl  
**Website:** www.iqproducts.nl

### 1.4 Emergency telephone numbers

Emergency Phone # 112

## 2. Hazard Identification

The IQ Ery Perm Kit is available as a 50 tests kit. The product is composed of a set of reagents, i.e. Reagent A, B, and C. All reagents are liquids containing the ingredients as presented below.

There are no reported further health hazards for the product in the current formulation and applications. Only Reagent B of the product composition does contain a dangerous substance in amounts that need to be hazard labeled according to EC Regulation No. 1272/2008 and (EU) 2024/2865. All other components of the product contain substances that may be hazardous when available in significant amounts and should be treated as potentially biohazardous.

Component	Content	Quantity
Reagent A	Fixative solution (A)	5 ml
Reagent B	Fixative solution (B);	5 ml
Reagent C	Permeabilization solution (C);	5 ml


## 2.1 Classification of the substance or mixture

Acute toxicity – category 3 (H331, H311, H301)

Carcinogenicity – category 2 (H351)

Skin sensitivity – category 1 (H317)

## 2.2 Label elements

<b>Pictogram</b>	
<b>Signal word</b>	DANGER
<b>Component</b>	Reagent B

### Hazard Statements (GHS\_US):

#### Reagent B:

H302 Harmful if swallowed;

H315 Causes skin irritation;

H317 May cause an allergic skin reaction;

H318 Causes serious eye damage;

H332 Harmful if inhaled;

H335 May cause respiratory irritation;

H351 Suspected of causing cancer;

### Precautionary Statements (GHS-US):

#### Reagent B:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking;

P261 Avoid breathing dust/fume/gas/mist/vapours/spray;

P280 Wear protective gloves/protective clothing/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;

#### General

P270 Do not eat, drink or smoke when using this product;

P262 Do not get in eyes, on skin, or on clothing;

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

P280 Wear protective gloves/protective clothing/eye protection/face protection.

## 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", 6th ed., 2020. HHS Publication No. (CDC) 300859, Centers for Disease Control.

There are no reported further health hazards for the product in the current formulation and applications. The product contains substances that may be hazardous when available in significant amounts and should be treated as potentially biohazardous. No toxic effects are to be expected when the product is handled appropriately. The product may enter the body through inhalation, ingestion, skin contact and eye contact.

Sodium azide forms explosive compounds with heavy metals. Components of this product contain azide < 0,1% (w/v). Repeated contact of these components with lead and copper, commonly found in plumbing drains, should be avoided as this may result in the buildup of shock-sensitive compound. On disposal, flush with large amounts of water to prevent azide build-up.

## 3. Composition/Information on ingredients

### 3.1 Substances

Not applicable.

### 3.2 Mixtures

#### Composition of the product:

CAS/EC-no.	Chemical name	Content	Classification CLP according to Regulation (EC) No 1272/2008 (CLP)	
			Hazard Class and Category Code(s)	Hazard statement
Reagent A				
26628-22-8	Fetal Bovine Serum (FBS)	99.91% (v/v)	N/A	N/A
26628-22-8	Sodium Azide	0.09% (v/v)	Not applicable concentration limit ≥ 1 % according to (EU) No. 2020/878.	
Reagent B				
50-00-0	Formaldehyde	6.0 % (w/v)	Carc. 2 Acute Tox. 3 Acute Tox. 3 Acute Tox. 3 Skin Sens. 1	H351 H331 H311 H301 H317
14431-43-7	Glucose	5.96 % (w/v)	N/A	N/A
6138-23-4	Trehalose	7.56 % (w/v)	N/A	N/A
1310-73-2	Sodium hydroxide	0.43 % (w/v)	Not applicable concentration limit ≥ 1 % according to (EU) No. 2020/878.	
10049-21-5	Sodiumdihydrogen phosphate monohydrate (NaH <sub>2</sub> PO <sub>4</sub> )	1.88 % (w/v)	N/A	N/A
Reagent C				
N/A*	Phosphate buffered Saline (10x)	10.0 % (v/v)	See below	See below
9005-49-6	Heparin	0.2 % (v/v)	N/A	N/A
151-21-3	Sodium Dodecyl Sulfate	0.3 % (v/v)	N/A	N/A

\* Phosphate Buffered Saline (10x) is produced in-house - composition of this component is shown here:

CAS/EC-no	Chemical Name	Content [(%) w/v]	Hazard Class and Category Code(s)	Hazard statement
N/A	Demineralized water	89.60	N/A	N/A
7647-14-5	Sodium chloride	8.75	N/A	N/A
10028-24-7	Sodium phosphate dibasic dihydrate	1.41	N/A	N/A
7778-77-0	Potassium dihydrogen phosphate	0.24	N/A	N/A

## 4. First-aid Measures

### 4.1 Description of first aid measures

Inhalation: Expose to fresh air. If breathing problems persist seek medical advice.  
 Skin Contact: Wash with plenty of water for 15 minutes. Remove contaminated clothing. Seek medical advice.  
 Eye Contact: Rinse with water for 15 minutes and seek medical advice.

Ingestion: Rinse mouth with water for 15 minutes and seek medical advice.

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

Not available.

#### **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 carbon dioxide, dry chemical extinguisher or water.

Protective Equipment: An approved self-contained breathing apparatus and protective clothing should be used.

Special Fire and Explosion Hazards: No special hazards determined.

Hazard Combustion Products: Due to the composition and volume of this product, combustion products generated from it are not expected to present a significant hazard.

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

No special hazards determined.

#### **5.3 Advice for firefighters**

This product does not cause special protective equipment to be required. In the event of a large laboratory fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full-face piece operated in the pressure demand or other positive pressure mode. Water spray may be used to keep fire-exposed containers cool. Poisonous gases may be produced in fires.

### **6. Accidental Release Measures**

#### **6.1 Personal Precautions, Protective Equipment and Emergency Procedures**

Use universal precautions, appropriate personal protective equipment and standard safe laboratory practices to clean up spilled substance promptly. Absorb spill onto an appropriate material. Avoid contact with eyes, skin and clothing. Wear safety glasses and protective gloves.

#### **6.2 Environmental Precautions**

No known environmental precautions.

#### **6.3 Methods and Material for Containment and Cleaning Up**

Soak up spills with an appropriate absorbent material. Consult local, state, or federal regulations for proper disposal.

#### **6.4 Reference to Other Sections**

Follow protective measures provided in Sections 7, 8 and 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.

In addition, this product should be handled as though capable of transmitting infectious diseases. Universal precautions should be followed when using this product.

#### **7.2 Conditions for Safe Storage, Including Any Incompatibilities**

All components of the Fetal Cell Count™ kit are stable if stored according to appropriate conditions until the expiration date as indicated on the label and on each component provided. Storage conditions recommended: 2 to 8 °C. Protect the kit 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: None required

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Reagent A			
<b>Physical state:</b> Liquid, clear	<b>Colour:</b> Light yellow	<b>Odour:</b> No data available	<b>Melting/freezing point:</b> No data available
<b>Initial boiling point and range:</b> Not applicable	<b>Flammability:</b> No data available	<b>Lower and upper explosion limit:</b> No data available	<b>Flash point:</b> Not applicable
<b>Auto-ignition temperature:</b> Not self-igniting	<b>Decomposition temperature:</b> Not applicable	<b>pH:</b> 5,4 - 5,6	<b>Kinematic viscosity:</b> No data available
<b>Solubility:</b> Fully miscible in water	<b>Partition coefficient n-octanol/water:</b> No data available	<b>Vapour pressure:</b> Not applicable	<b>(relative) density:</b> Not applicable
<b>Relative vapour density:</b> Not applicable	<b>Particle characteristics:</b> Not applicable	<b>Explosive properties</b> Not explosive	<b>Oxidizing properties</b> Not oxidizing

Reagent B			
<b>Physical state:</b> Liquid, clear	<b>Colour:</b> Colourless	<b>Odour:</b> No data available	<b>Melting/freezing point:</b> No data available
<b>Initial boiling point and range:</b> Not applicable	<b>Flammability:</b> No data available	<b>Lower and upper explosion limit:</b> No data available	<b>Flash point:</b> Not applicable
<b>Auto-ignition temperature:</b> Not self-igniting	<b>Decomposition temperature:</b> Not applicable	<b>pH:</b> 5,4 - 5,6	<b>Kinematic viscosity:</b> No data available
<b>Solubility:</b> Fully miscible in water	<b>Partition coefficient n-octanol/water:</b> No data available	<b>Vapour pressure:</b> Not applicable	<b>(relative) density:</b> Not applicable
<b>Relative vapour density:</b> Not applicable	<b>Particle characteristics:</b> Not applicable	<b>Explosive properties</b> Not explosive	<b>Oxidizing properties</b> Not oxidizing

Reagent C			
<b>Physical state:</b> Liquid, clear	<b>Colour:</b> Light white	<b>Odour:</b> No data available	<b>Melting/freezing point:</b> No data available
<b>Initial boiling point and range:</b> Not applicable	<b>Flammability:</b> No data available	<b>Lower and upper explosion limit:</b> No data available	<b>Flash point:</b> Not applicable
<b>Auto-ignition</b>	<b>Decomposition</b>	<b>pH:</b>	<b>Kinematic viscosity:</b>

<b>temperature:</b>	<b>temperature:</b>		
Not self-igniting	Not applicable	5,4 - 5,6	No data available
<b>Solubility:</b>	<b>Partition coefficient n-octanol/water:</b>	<b>Vapour pressure:</b>	<b>(relative) density:</b>
Fully miscible in water	No data available	Not applicable	Not applicable
<b>Relative vapour density:</b>	<b>Particle characteristics:</b>	<b>Explosive properties</b>	<b>Oxidizing properties</b>
Not applicable	Not applicable	Not explosive	Not oxidizing

## 9.2 Other information

No other physical and chemical parameters are applicable relevant to the safe use the IQ Ery Perm kit.

## 10. Stability and Reactivity

### 10.1 Reactivity

No known reactivity.

### 10.2 Chemical stability

The product is stable under ambient storage and handling temperatures and under normal pressures.

### 10.3 Possibility of hazardous reactions

No hazardous reactions known when handled properly.

### 10.4 Conditions to avoid

None identified.

### 10.5 Incompatible materials

Metals and metallic compounds. Strong acids, strong oxidizing agents, powdered metals and reducing agents. Sodium azide forms explosive compounds with heavy metals. Components of this product contain azide < 0,1% (w/v). Repeated contact of these components with lead and copper, commonly found in plumbing drains, should be avoided as this may result in the buildup of shock-sensitive compound. No hazardous incompatibilities identified.

### 10.6 Hazardous decomposition products

No hazardous decomposition products are known to be formed by this product.

## 11. Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No. 1272/2008

**Acute toxicity:** No toxic effect known.

**Skin corrosion/irritation:** No irritant effect known.

**Serious eye damage/irritation:** No irritant effect known.

**Respiratory or skin sensitization:** No sensitizing effect known.

**Germ cell mutagenicity:** No data available

**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:** Not Classified

### 11.2 Information on other hazards

No other information on adverse health effects are identified relevant to the safe use of the IQ Ery Perm™ kit.

## 12. Ecological information

### 12.1 Toxicity

Undetermined.

### 12.2 Persistence and degradability

Undetermined.

### 12.3 Bioaccumulative potential

Undetermined.

#### **12.4 Mobility in soil**

Undetermined.

#### **12.5 Results of PBT and vPvB assessment**

Undetermined.

#### **12.6 Endocrine disrupting properties**

Undetermined.

#### **12.7 Other adverse effects**

No adverse effects are known when handled and disposed properly.

### **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 or ID Number**

Not determined.

#### **14.2 UN proper shipping name**

Not determined.

#### **14.3 Transport hazard class(es)**

Not determined.

#### **14.4 Packing group**

Not determined.

#### **14.5 Environmental hazards**

Not classified.

#### **14.6 Special precautions for users**

See subsections 6-8 and 13.

#### **14.7 Maritime transport in bulk according to IMO instruments**

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**

SARA Section 311/312 Hazard Classes are not applicable. This product is not classified. To the best of our knowledge, safety, health, and environmental regulations according to Regulation (EC) No. 1907/2006-REACH are not applicable.

#### **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) No. 1272/2008, (EU) No. 453/2010, (EU) No. 2015/830, (EU) 2020/878 and (EU) 2024/2865.

<b>Current version</b>	Revision 1.0, June 2025
<b>Previous version</b>	No, first version
<b>Changes</b>	N/A
<b>Justification</b>	N/A

### Literature References

Regulation (EC) No. 1907/2006  
Regulation (EC) No. 1272/2008  
Regulation (EU) No. 453/2010  
Regulation (EU) No. 2015/830  
Regulation (EU) No. 2020/878  
Regulation (EU) No. 2024/2865

### 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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