



S a f e t y   D a t a   S h e e t  
According to Regulation (EC) 1907/2006  
and (EU) 453/2010

**1572 Hanus Reagent 0,1 mol/l \*(0,2N)**

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

**1.1 Product identifier**

Name:

Hanus Reagent 0,1 mol/l \*(0,2N)

**REACH Registration Number:** A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) N<sup>o</sup> 1907/2006, the annual tonnage does not require a registration, the registration is envisaged for a later registration deadline or it is a mixture.

**1.2 Relevant identified uses of the substance or mixture:**

For laboratory utilisation, analysis, research and fine chemistry.

**1.3 Identification of the company or firm:**

PANREAC QUIMICA S.L.U.

C/Garraf 2

Polígono Pla de la Bruguera

E-08211 Castellar del Vallès

(Barcelona) Spain

Tel. (+34) 937 489 400

e-mail: [product.safety@panreac.com](mailto:product.safety@panreac.com)

**1.4 Emergency telephone:**

Single telephone number for emergency calls: 112 (EU)

Tel.: (+34) 937 489 499

**2. Identification of dangers**

**2.1 Classification of the substance or the mixture.**

**Classification Regulation (CE) n<sup>o</sup> 1272/2008.**

Flam. Liq. 3

Skin Corr. 1A

Aquatic Chronic 3

**Classification (67/548/CEE or 1999/45/CE).**

C Corrosive

R52  
R35  
R10

**2.2 Label elements:**

**Hazard Pictograms**



**Signal word**

Danger

**Hazard statements**

H226 Flammable liquid and vapour.

H314 Causes severe skin burns and eye damage.

H412 Harmful to aquatic life with long lasting effects.

**Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P242 Use only non-sparking tools.

P501 Dispose of contents/container according to Directive 94/62/CE or 2008/98/CE.

For the full text of the R-phrases mentioned in this section, see section 16.

**2.3 Other hazards:**

No further relevant information available.

**3. Composition/information on ingredients**

Aqueous solution

Name: Hanus Reagent 0,1 mol/l \*(0,2N)

## COMPOSITION:

### 0001: Acetic Acid glacial

Formula: CH<sub>3</sub>COOH M.= 60,05 CAS [64-19-7]  
EC number (EINECS): 200-580-7  
EC index number: 607-002-00-6  
REACH Registration Number: 01-2119475328-30-XXXX

**Content:** >= 90 %

### Classification Regulation (CE) nº 1272/2008.

Flam. Liq. 3  
Skin Corr. 1A

### Hazard Pictograms



### Signal word

Danger

### Hazard statements

H226 Flammable liquid and vapour.  
H314 Causes severe skin burns and eye damage.

### Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P233 Keep container tightly closed.  
P240 Ground/bond container and receiving equipment.  
P241 Use explosion-proof electrical/ventilating/lighting/equipment.  
P242 Use only non-sparking tools.  
P501 Dispose of contents/container according to Directive 94/62/CE or 2008/98/CE.  
P243 Take precautionary measures against static discharge.  
P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P264 Wash...thoroughly after handling.  
P280 Wear protective gloves, protective clothing, eye protection or face protection.  
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
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 POISON CENTER or doctor/physician.  
P338 Remove contact lenses, if present and easy to do. Continue rinsing.  
P363 Wash contaminated clothing before reuse.  
P370+P378 In case of fire: Use for extinction.  
P403+P235 Store in a well-ventilated place. Keep cool.

**Classification (67/548/CEE or 1999/45/CE).**

**C** Corrosive

**R10** Flammable.

**R35** Causes severe burns.

**0002: Iodine mono-Bromide**

Formula: IBr M.= 206,84 CAS [7789-33-5]

EC number (EINECS): 232-159-9

**Content:** >= 1 % <= 5 %

**Classification Regulation (CE) n° 1272/2008.**

Skin Corr. 1B

STOT SE 3

**Hazard Pictograms**



**Signal word**

Danger

**Hazard statements**

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

**Precautionary statements**

P280 Wear protective gloves, protective clothing, eye protection or face protection.

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P501 Dispose of contents/container according to Directive 94/62/CE or 2008/98/CE.

**Classification (67/548/CEE or 1999/45/CE).**

**C** Corrosive

**R34** Causes burns.

**R37** Irritating to respiratory system.

**4. First aid measures**

**4.1 General indications:**

Never provide drink or induce vomiting in the event of loss of consciousness.

**4.2 Inhaling:**

Take the person out into the fresh air. In the event sickness persists, seek medical assistance.

#### **4.3 Contact with the skin:**

Wash with plenty of water. Remove contaminated clothing. Take the product out with cotton wool soaked in polyethylene-glycol 400.

#### **4.4 Eyes:**

Wash with plenty of water (for at least 15 minutes), keeping eyelids open. Seek immediate medical assistance.

#### **4.5 Swallowing:**

Drink large amounts of water. Avoid vomiting (there is a risk of perforation). Seek immediate medical assistance. Do not neutralize.

### **5. Firefighting measures**

#### **5.1 Suitable extinguishing media:**

Water. Carbon dioxide (CO<sub>2</sub>). Alcohol resistant foam. Dry powder.

#### **5.2 Unsuitable extinguishing media:**

No specific data.

#### **5.3 Special hazards arising from the substance or mixture:**

Combustible. Keep away from sources of ignition. The fumes are heavier than air, so they may spread at floor level. Auf Rückzündung achten In the event of fire, fumes may form: I<sub>2</sub>, Br<sub>2</sub>. acetic acid.

#### **5.4 Advice for firefighters:**

Suitable clothing and footwear.

### **6. Accidental release measures**

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

Do not inhale the fumes. Avoid contact with the skin, eyes or clothing.

#### **6.2 Environmental precautions:**

Avoid pollution of the soil, water supplies and drains.

#### **6.3 Methods and material for containment and cleaning up:**

Collect up with absorbent materials (Panreac General Absorbent, Kieselguhr, etc.) or, if none available, dry sand or earth, and deposit in waste containers for subsequent elimination in accordance with current legislation. Clean any remains with plenty of water.

### **7. Handling and storage**

#### **7.1 Precautions for safe handling:**

Limited shelf-life.

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

Well sealed containers. In well ventilated premises. Away from sources of ignition and heat.

**Recommended storage temperature:** Room temperature. Do not store in metal containers.

### **8. Exposure controls/personal protection**

### **8.1 Exposure controls:**

No special indications.

### **8.2 Control parameters:**

CEE(referring to acetic acid): 25 mg/m<sup>3</sup> VLA-EC(referring to acetic acid): 15 ppm = 37 mg/m<sup>3</sup> VLA-ED(referring to acetic acid): 10 ppm = 25 mg/m<sup>3</sup>

### **8.3 Respiratory protection:**

In the event of fumes forming/aerosols, use suitable respiratory protection. Filter B. Filter P.

### **8.4 Hand protection:**

Use suitable gloves neopren nitrile

### **8.5 Eye/face protection:**

Use suitable goggles.

### **8.6 Individual hygiene measures:**

Remove contaminated clothing. Use suitable work clothing. Wash hands and face before breaks and when the job is done.

### **8.7 Environmental exposure controls:**

Fulfill the commitments under local environmental protection legislation.

## **9. Physical and chemical properties**

Appearance: liquid

Colour: reddish yellow

Granulometry: N/A

Odour: Piquant.

pH: <1

Melting point/freezing point: N/A

Initial boiling point and boiling range:

N/A

Flash point: ~ 40 °C

Flammability (solid, gas):

N/A

Upper/lower flammability or explosive limits:

N/A

Vapour pressure: N/A

Vapour density: N/A

Relative density:

Insertar Aquí Grupo de repetición

(20/4) 1,069 g/ml

Solubility: Miscible with water

Partition coefficient: n-octanol/water:

N/A

Auto-ignition temperature:

N/A

Decomposition temperature: N/A

Kinematic viscosity: N/A

Dynamic viscosity:

N/A

## **10. Stability and reactivity**

**10.1 Conditions to avoid:**

High temperatures.

**10.2 Incompatible materials:**

Anhydrides. Aldehydes. Halogen halides. Oxidant agents. Alkaline hydroxides. Non-metal halides. Alkaline solutions.

**10.3 Hazardous decomposition products:**

In case of fire, fumes of acetic acid.

**10.4 Chemical stability:**

The gases/fumes can form explosive mixtures with the air.

**11. Toxicological information****11.1 Acute toxicity:**

: Data not available.

**11.2 Dangerous effects for health:**

If fumes inhaled: Irritations to the respiratory tracts. Very corrosive substance. Upon contact with the skin: burns Through contact with the eyes: burns sight disorders Risk of blindness (irreversible injury of the optic nerve) If swallowed: Burns in the oesophagus and stomach. May cause: spasms vomiting breathing difficulties Risk of perforation in the oesophagus and stomach. Risk of aspiration upon vomiting. The following cannot be ruled out: shock cardiovascular failure acidosis kidney problems Due to absorption: effects on the central nervous system Risk of sensitization allergic reaction Other dangerous characteristics are not discarded. Take the usual precautions for handling chemical products.

**12. Environmental information****12.1 Toxicity:**

Ecotoxic data not available.

**12.2 Persistence and Degradability :**

Data not available.

**12.3 Bioaccumulative potential:**

Data not available.

**12.4 Mobility in soil :**

Data not available.

**12.5 Assessment PBT and MPMB :**

Data not available.

**12.6 Other adverse effects:**

Corrosive product, even in diluted form.  
Pollutant product.

**13. Disposal considerations**

### **13.1 Waste treatment methods:**

In the European Union, there are no homogeneous standards established for elimination of chemical waste, which is waste of a special nature, and treatment and elimination of same is subject to the domestic legislation in each country.

In view of this, in each case, you should contact the competent authority or those companies legally authorized for elimination of waste.

2001/573/EC: Council Decision of 23 July 2001 amending Commission Decision 2000/532/EC as regards the list of wastes. Council Directive 91/156/EEC of 18 March 1991 amending Directive 75/442/EEC on waste.

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### **13.2 Contaminated containers:**

Contaminated containers and packaging of dangerous substances or preparations must be treated in the same manner as the actual products contained in them.

European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste.

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## **14. Transport information**

Overland (ADR):

Technical name: CORROSIVE LIQUID, FLAMMABLE, N.O.S.

UN 2920 Class: 8 3 CONTAM. MAR Packaging group: II (D/E)

By sea (IMDG):

Technical name: CORROSIVE LIQUID, FLAMMABLE, N.O.S.

UN 2920 Class: 8 3 CONTAM. MAR Packaging group: II

By air (ICAI-IATA):

Technical name: Corrosive liquid flammable, n.o.s.

UN 2920 Class: 8 3 CONTAM. MAR Packaging group: II

Packaging instructions: CAO 855 PAX 851

## **15. Regulatory information**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

## **16. Other information**

### Other precautionary statements

P243 Take precautionary measures against static discharge.  
P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P264 Wash...thoroughly after handling.  
P273 Avoid release to the environment.  
P280 Wear protective gloves, protective clothing, eye protection or face protection.  
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
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 POISON CENTER or doctor/physician.  
P321 Specific treatment (see on this label).  
P338 Remove contact lenses, if present and easy to do. Continue rinsing.  
P363 Wash contaminated clothing before reuse.  
P370+P378 In case of fire: Use for extinction.  
P403+P235 Store in a well-ventilated place. Keep cool.  
P405 Store locked up.

### Labelling (65/548/CEE or 1999/45/CE)

R-phrases(s):	<b>R52</b> Harmful to aquatic organisms. <b>R35</b> Causes severe burns. <b>R10</b> Flammable.
S-phrases(s):	<b>S45</b> In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). <b>S36/37/39</b> Wear suitable protective clothing, gloves and eye/face protection. <b>S26</b> In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. <b>S23c</b> Do not breathe vapour.

Version and revision date : 4 15.09.2011

Date published: 15.09.2011

In respect of the previous review, changes have been made to the following sections: 15

The information included in this Safety Data Sheet is based on our most up-to-date knowledge, and is solely intended to inform regarding aspects of safety; the properties and characteristics indicated herein are not guaranteed.