

Revision: 3.0

(Replaces revision 2.0 of 23 February 2021)

Revision date:

25 March 2025

Date printed:

29 March 2025

**Section 1. Identification****1.1 Product Identifier** 2730

Product Name COLOUR STANDARD REAGENT 400 HAZEN

CAS Number Mixture

REACH Registration No A registration number is not available as the substance or its uses are exempt, the annual tonnage does not require a registration or the registration is envisaged for a later date.

**1.2 Relevant identified uses of the substance or mixture & uses advised against**

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

**1.3 Supplier** Vickers Laboratories LtdGrangefield Industrial Estate  
Richardshaw Road  
Pudsey  
West Yorkshire  
LS28 6QW  
UNITED KINGDOM

Phone 44 0113 2362811

Fax +44(0)113 2362703

Email safety@viclabs.co.uk

Website www.viclabs.co.uk

**1.4 Emergency Telephone** (08:00-16:30) +44(0) 113 2362811  
(24hr) 112  
(Have this document to hand)**Section 2. Hazards Identification****2.1 Classification of the substance or mixture****Classification according to regulation 1272/2008/EC**

Carcinogenicity, category 1B

H350: May cause cancer.

**2.2 Label elements****Labelling according to regulation 1272/2008/EC**

Signal word Danger

Hazard Pictograms



Hazard Statements May cause cancer.

Precautionary Statements    Wear protective gloves / protective clothing / eye protection / face protection. IF exposed or concerned: Get medical advice/attention. Dispose of contents / container to an approved waste disposal plant

## Section 3. Composition

### 3.2 Mixtures

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Hydrochloric acid	7647-01-0	231-595-7	01-2119484862-27-XXXX	3.2%	Skin Corr. 1B,STOT SE 3 (I)
Cobalt Chloride 6H <sub>2</sub> O	7791-13-1	231-589-4	01-2119517584-37-XXXX	0.08%	Acute Tox. 4 (O),Eye Dam. 1,Resp. Sens. 1,Skin Sens. 1,Muta. 2,Carc. 1B,Repr. 1B,Aquatic Acute 1,Aquatic Chronic 1
Platinum compounds [as Pt]	16921-30-5	240-979-3		0.08%	Acute Tox. 3 (O),Eye Dam. 1,Resp. Sens. 1,Skin Sens. 1

## Section 4. First Aid

### 4.1 Description of first aid measures

Eyes	Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. OBTAIN MEDICAL ATTENTION.
Skin	Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use.
Inhalation	Remove from exposure.
Ingestion	Wash out the patients mouth thoroughly with water.
Personal protection for first aiders	Wear protective gloves / eye protection.

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

No further relevant information available.

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

No further relevant information available.

## Section 5. Fire Fighting

### 5.1 Extinguishing media

Extinguishing Media	Consider what other flammable materials are present and act accordingly.
Unsuitable Media	Nothing specified.

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

Hazards	Presents no specific fire danger.
---------	-----------------------------------

### 5.3 Advice for firefighters

Advice for firefighters	Consider all other materials in the vicinity.
-------------------------	---

## Section 6. Accidental Release Measures

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

Personal Protection	Use approved personal protective equipment. Evacuate area immediately. Do not allow general use of area until it is safe to do so.
---------------------	--

### 6.2 Environmental precautions

Environmental	Keep non-neutralised material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.
---------------	--

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

Major Spillage	Contain and absorb on inert material. Transfer absorbent to salvage container for removal. Wash area down with copious amounts of water.
Minor Spillage	Wash area down with copious amounts of water.

#### 6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

## Section 7. Storage & Handling

#### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breath vapours. Do not allow to contaminate clothing.

Ensure Local Exhaust Ventilation maintains vapour concentrations below the recommended limits.

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

Well ventilated, cool, dry storage .

#### 7.3 Specific end use(s)

See section 1.2.

## Section 8. Workplace Exposure & Personal Protection

#### 8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits			
			Long Term (8hr TWA)		Short Term 15min period	
Hydrochloric acid	7647-01-0	3.2%	1.0 ppm	2.0 mg/m-3	5.0 ppm	8.0 mg/m-3
Cobalt Chloride 6H2O	7791-13-1	0.08%	-	-	0.1 ppm	-
Platinum compounds [as Pt]	16921-30-5	0.08%	-	-	0.002 ppm	-

Exposure data source(s) IOELV: Indicative Occupational Exposure Limit Value.

#### 8.2 Exposure controls

Respiratory Protection	Use L.E.V. or natural ventilation to maintain vapour concentrations below exposure limits. If not, use a well maintained chemical cartridge respirator, or use self contained breathing apparatus.
Hand Protection	Wear gloves.
Eye Protection	Use tightly fitting chemical splash proof glasses or goggles.
Skin Protection	If skin contact or contamination of clothing is likely, protective clothing must be worn.
Special Hazards	No special precautions required.

## Section 9. Physical & Chemical Properties

#### 9.1 Information on basic physical and chemical properties

Appearance	Straw coloured liquid.
Odour	Odourless.
pH	2 @ 20°C
Boiling Point	Aqueous solution
Melting Point	Not applicable
Flash Point	Not applicable
Upper Flammable Limit	Not applicable
Lower Flammable Limit	Not applicable
Auto Ignition	Not applicable
Explosive Properties	No.
Oxidising Properties	No.
Vapour Pressure	Not applicable
Relative Density	1.0160
Water Solubility	Completely miscible in water.

#### 9.2 Other information

No data available.

## Section 10. Stability & Reactivity

10.1	Reactivity	No data available.
10.2	Chemical Stability	Stable under normal conditions
10.3	Possibility of hazardous reactions	No data available.
10.4	Conditions to Avoid	No specific conditions.
10.5	Incompatible Materials	Alkalis.
10.6	Hazardous Decomposition Products	Will decompose to emit toxic and irritant fumes of hydrogen chloride.

## Section 11. Toxicological Information

### 11.1 Information on toxicological effects

Eyes	Causes serious eye damage.
Skin	Presents no significant hazard by skin contact.
LD50 Skin	Not available
Ingestion	Presents no significant hazard by ingestion.
LD50 Oral	Not available
Inhalation	Presents no significant health hazard by inhalation.
LD50 Inhalation	Not available
TCLo	Not available
Carcinogenicity	Contains cobalt dichloride a class 2 carcinagen, therefore may cause cancer by inhalation.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	None identified.

## Section 12. Ecological

12.1	Toxicity	No specific environmental hazard.
	LC50 Algal	Not available
	LC50 Crustacea	Not available
	LC50 Fish	Not 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 & vPvB assessment	Assessment not required.
12.6	Other adverse effects	None known at present.

## Section 13. Disposal Considerations

### 13.1 Waste treatment methods

Disposal Methods	Dilute in a large excess of water and carefully neutralise with soda ash, then wash to drain with copious amounts of water.
Contaminated Packaging	Use a licensed waste disposer. Carefully neutralise with a weak sodium hydroxide solution then wash out thoroughly with water.

## Section 14. Transport Information

14.1 UN Number	Non-restricted
14.2 Proper Shipping Name	Non-restricted
14.3 Transport classes	
UN classification	None
Subsidiary hazard(s)	None
Transport category	None
ADR Hazard ID	Non-restricted
Tunnel Restriction Code	Non-restricted
14.4 Packing Group	None
14.5 Environment hazards	See section 12.
14.6 Special precautions for user	No special precautions required.
14.7 Transport in bulk	Not transported in bulk.

## Section 15. Regulatory Information

### 15.1 Safety, health and environment regulations specific for substance/mixture.

#### Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification Carcinogenicity, category 1B

Signal word Danger

Hazard Pictograms



Hazard Statements H350  
May cause cancer.

Precautionary Statements P280, P308+P313, P501  
Wear protective gloves / protective clothing / eye protection / face protection. IF exposed or concerned: Get medical advice/attention. Dispose of contents / container to an approved waste disposal plant

### 15.2 Chemical safety assessment

Assessment not required.

## Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

Revision number: 3.0 (Supercedes revision 2.0)

Revision date: 25 March 2025

Reviewed by chemist: 25 March 2025

Printed date: 29 March 2025

Copyright: 2025 Vickers Laboratories Ltd