



# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (amended by Regulation (EU) No 453/2010)

Revision date: 30.07.2014

Version: 4.0

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## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

Trade name/designation:	Iodine trichloride (Wijs'reagent) for determination of iodine value
Product No.:	02812 (VWR International)
Substance name:	Iodine trichloride (Wijs'reagent)
CAS No.:	865-44-1
INDEX No.:	000-000-00-0
REACH registration No.:	Not yet communicated down the supply chain.
Other means of identification:	

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

Relevant identified uses:	General chemical reagent
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### 1.3 Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor)

#### *United Kingdom*

##### **VWR International Ltd.**

Street	Hunter Boulevard, Magna Park
Postal code/city	Lutterworth, LE17 4XN
Telephone	0800 22 33 44
Telefax	01455 55 85 86
E-mail (competent person)	vwr@sds@eu.vwr.com

##### **Emergency telephone**

Telephone	+44 (0) 1270 502894
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#### *Ireland*

##### **VWR International Ltd.**

Street	Orion Business Campus, Northwest Business Park
Postal code/city	Ballycoolin, Dublin 15
Telephone	+353 1 8822222
Telefax	+353 1 8822333
E-mail (competent person)	vwr@sds@eu.vwr.com

##### **Emergency telephone**

Telephone	+44 (0) 1270 502894
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## *Ireland*

### **VWR International (Northern Ireland) Ltd.**

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Telefax	+353 1 8822333
E-mail (competent person)	vwrlds@eu.vwr.com

### **Emergency telephone**

Telephone	+44 (0) 1270 502894
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## *Netherlands*

### **VWR International B.V.**

Street	Basisweg 34
Postal code/city	1043 AP Amsterdam
Telephone	+32 16 385 011
Telefax	+32 16 385 385
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### **Emergency telephone**

Telephone	+44 (0) 1270 502894
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## *Switzerland*

### **VWR International GmbH**

Street	Lerzenstrasse 16/18
Postal code/city	8953 Dietikon
Telephone	+44 (0) 745 13 13
Telefax	+44 (0) 745 13 10
E-mail (competent person)	vwrlds@eu.vwr.com

### **Emergency telephone**

Telephone	145
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## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

#### 2.1.1 Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements
Skin corrosion, category 1B	H314
Specific target organ toxicity (single exposure), category 3, vascular	H335
Substance or mixture corrosive to metals, category 1	H290

### 2.2 Label elements

#### 2.2.1 Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms



**Signal word:** Danger

Hazard statements	
H314	Causes severe skin burns and eye damage.
H335	May cause respiratory irritation.
H290	May be corrosive to metals.

Precautionary statements	
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P309+P310	IF exposed or if you feel unwell: Immediately call a POISON CENTER or doctor/physician.

Other hazards

SVHC No

## SECTION 3: Composition / information on ingredients

### 3.1 Substances

Molecular formula	Cl <sub>3</sub> I
Molecular weight	233,26 g/mol
CAS No.	865-44-1
REACH registration No.	Not yet communicated down the supply chain.
INDEX No.	000-000-00-0



## SECTION 4: First aid measures

### 4.1 General information

IF exposed: Immediately call a POISON CENTRE/doctor/.... If unconscious place in recovery position and seek medical advice. Never give anything by mouth to an unconscious person or a person with cramps. Change contaminated, saturated clothing. Do not leave affected person unattended.

#### After inhalation

Immediately call a POISON CENTRE/doctor/.... Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

#### In case of skin contact

After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. Immediate medical treatment required because corrosive injuries that are not treated are hard to cure.

#### After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye. Remove contact lenses, if present and easy to do. Continue rinsing.

#### In case of ingestion

Immediately call a POISON CENTRE/doctor/.... Do NOT induce vomiting. Rinse mouth thoroughly with water. Give nothing to eat or drink.

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

no data available

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

no data available

### 4.4 Self-protection of the first aider

First aider: Pay attention to self-protection!

### 4.5 Information to physician

no data available

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

#### Extinguishing media which must not be used for safety reasons

no restriction

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

In case of fire may be liberated: Hydrogen chloride (HCl) Hydrogen iodide (HI) Sulphur oxides

### 5.3 Advice for firefighters

DO NOT fight fire when fire reaches explosives. In case of fire: Wear self-contained breathing apparatus.

### 5.4 Additional information

Do not allow run-off from fire-fighting to enter drains or water courses. Do not inhale explosion and combustion gases. Use caution when applying carbon dioxide in confined spaces. Carbon dioxide can displace oxygen. Use water spray jet to protect personnel and to cool endangered containers.



## SECTION 6: Accidental release measures

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

Avoid generation of dust. Do not breathe dust. Provide adequate ventilation. Avoid contact with skin, eyes and clothes.

### 6.2 Environmental precautions

Do not allow to enter into surface water or drains.

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

Spilled product must never be returned to the original container for recycling. Take up carefully when dry. Avoid generation of dust. Clean contaminated objects and areas thoroughly observing environmental regulations. Collect in closed and suitable containers for disposal.

### 6.4 Additional information

Clear spills immediately.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

All work processes must always be designed so that the following is as low as possible: Inhalation skin contact Eye contact If handled uncovered, arrangements with local exhaust ventilation have to be used. If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means. Usual measures for fire prevention. Handle under (Gas): Protective gas, dry

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

storage temperature: -20 °C

Storage class: 8A

Keep container tightly closed in a cool, well-ventilated place.

### 7.3 Specific end use(s)

no data available

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Does not contain substances above concentration limits fixing an occupational exposure limit.

### 8.2 Exposure controls

#### 8.2.1 Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment. If handled uncovered, arrangements with local exhaust ventilation have to be used.

#### 8.2.2 Personal protection equipment

Wear suitable protective clothing. When handling with chemical substances, protective clothing with CE-labels including the four control digits must be worn. For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes).

##### *Eye/face protection*

Eye glasses with side protection DIN-/EN-Norms: DIN EN 166

Recommendation: VWR 111-0432

##### *Skin protection*

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. Recommended glove articles DIN-/EN-Norms: DIN EN 374 In the case of wanting to use the gloves again, clean them before taking off and air them well.



By short-term hand contact

Suitable material:	NBR (Nitrile rubber)
Thickness of the glove material:	0,12 mm
Breakthrough time (maximum wearing time):	> 480 min
Recommended glove articles:	VWR 112-0998

By long-term hand contact

Suitable material:	NBR (Nitrile rubber)
Thickness of the glove material:	0,38 mm
Breakthrough time (maximum wearing time):	> 480 min
Recommended glove articles:	VWR 112-3717 / 112-1381

*Respiratory protection*

Respiratory protection necessary at: aerosol or mist formation

Suitable respiratory protection apparatus:	Full-/half-/quarter-face masks (DIN EN 136/140)
Recommendation:	VWR 111-0206
Suitable material:	A2B2E2K2P3
Recommendation:	VWR 111-0059

*Additional information*

Wash hands before breaks and after work. Avoid contact with skin and eyes. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

**8.2.3** *Environmental exposure controls*  
no data available

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

(a) Appearance	
Physical state:	solid
Colour:	red brown
(b) Odour:	no data available
(c) Odour threshold:	no data available

#### Safety relevant basic data

(d) pH:	no data available
(e) Melting point/freezing point:	63 °C
(f) Initial boiling point and boiling range:	no data available
(g) Flash point:	40 °C
(h) Evaporation rate:	no data available
(i) Flammability (solid, gas):	not applicable
(j) Upper/lower flammability or explosive limits	
Lower explosion limit:	no data available
Upper explosion limit:	no data available
(k) Vapour pressure:	1.3 hPa (64 °C)
(l) Vapour density:	no data available
(m) Relative density:	1.23 g/cm <sup>3</sup> (20 °C)
(n) Solubility(ies)	
at 20 °C:	no data available
Soluble (g/L) in:	no data available
(o) Partition coefficient: n-octanol/water:	no data available
(p) Auto-ignition temperature:	no data available
(q) Decomposition temperature:	>60 °C (1013 hPa)
(r) Viscosity	
Kinematic viscosity:	no data available
Dynamic viscosity:	no data available
(s) Explosive properties:	not applicable
(t) Oxidising properties:	not applicable

### 9.2 Other information

Bulk density:	no data available
Refraction index:	no data available
Dissociation constant:	no data available
Surface tension:	no data available
Henry constant:	no data available

## SECTION 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

### 10.7 Additional information

no data available

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute effects

*Acute oral toxicity:*

no data available

*Acute dermal toxicity:*

no data available

*Acute inhalation toxicity:*

no data available

#### Irritant and corrosive effects

*Primary irritation to the skin:*

Causes severe skin burns and eye damage.

*Irritation to eyes:*

Causes serious eye damage.

*Irritation to respiratory tract:*

May cause respiratory irritation.

#### Respiratory or skin sensitisation

In case of skin contact: not sensitising

After inhalation: not sensitising

#### STOT-single exposure

May cause respiratory irritation.

#### STOT-repeated exposure

not applicable

#### CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

##### Carcinogenicity

No indication of human carcinogenicity.

##### Germ cell mutagenicity

No indications of human germ cell mutagenicity exist.

**Reproductive toxicity**

No indications of human reproductive toxicity exist.

**Aspiration hazard**

not applicable

**Other adverse effects**

no data available

**Additional information**

no data available

## SECTION 12: Ecological information

### 12.1 Ecotoxicity

**Acute (short-term) fish toxicity:**

no data available

**Chronic (long-term) fish toxicity:**

no data available

**Acute (short-term) daphnia toxicity:**

no data available

**Chronic (long-term) daphnia toxicity:**

no data available

**Acute (short-term) algae toxicity:**

no data available

**Chronic (long-term) algae toxicity:**

no data available

### 12.2 Persistence and degradability

no data available

### 12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water: no data available

### 12.4 Mobility in soil:

no data available

### 12.5 Results of PBT/vPvB assessment

no data available

### 12.6 Other adverse effects

no data available

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Appropriate disposal / Product

Dispose according to local legislation. Consult the appropriate local waste disposal expert about waste disposal. Send to a hazardous waste incinerator facility under observation of official regulations.

Waste code product: no data available

#### Appropriate disposal / Package

Dispose according to local legislation. Handle contaminated packages in the same way as the substance itself.

#### Additional information

no data available

## SECTION 14: Transport information

### Land transport (ADR/RID)

14.1 UN-No.:	3085
14.2 Proper Shipping Name:	OXIDIZING SOLID, CORROSIVE, N.O.S.
14.3 Class(es):	5.1
Classification code:	OC2
Hazard label(s):	5.1+8
14.4 Packing group:	II
14.5 Environmental hazards:	<b>No</b>
14.6 Special precautions for user:	
Hazard identification number (Kemler No.):	58
tunnel restriction code:	E
	(Passage forbidden through tunnels of category E.)

### Sea transport (IMDG)

14.1 UN-No.:	3085
14.2 Proper Shipping Name:	OXIDIZING SOLID, CORROSIVE, N.O.S.
14.3 Class(es):	5.1
Classification code:	
Hazard label(s):	5.1+8
14.4 Packing group:	II
14.5 Environmental hazards:	<b>No</b>
MARINE POLLUTANT:	No
14.6 Special precautions for user:	
Segregation group:	-
EmS-No.	F-A S-Q
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	
not relevant	



## Air transport (ICAO-TI / IATA-DGR)

14.1 UN-No.:	3085
14.2 Proper Shipping Name:	OXIDIZING SOLID, CORROSIVE, N.O.S., Acid
14.3 Class(es):	5.1
Classification code:	OC2
Hazard label(s):	5.1+8
14.4 Packing group:	II
14.5 Special precautions for user	not relevant

## SECTION 15: Regulatory information

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

#### General rules

Water hazard class (WGK):

EU: Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (Text with EEA relevance)

EU: Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (Text with EEA relevance)

EU: Commission Regulation (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (Text with EEA relevance)

### 15.2 Chemical Safety Assessment

no data available



## SECTION 16: Other information

### Abbreviations and acronyms

ACGIH - American Conference of Governmental Industrial Hygienists  
 ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road  
 AGS - Committee on Hazardous Substances (Ausschuss für Gefahrstoffe)  
 CLP - Regulation on Classification, Labelling and Packaging of Substances and Mixtures  
 DFG - German Research Foundation (Deutsche Forschungsgemeinschaft)  
 Gestis - Information system on hazardous substances of the German Social Accident Insurance (Gefahrstoffinformationssystem der Deutschen Gesetzlichen Unfallversicherung)  
 IATA-DGR - International Air Transport Association-Dangerous Goods Regulations  
 ICAO-TI - International Civil Aviation Organization-Technical Instructions  
 IMDG - International Maritime Code for Dangerous Goods  
 LTV - Long Term Value  
 NIOSH - National Institute for Occupational Safety and Health  
 OSHA - Occupational Safety & Health Administration  
 PBT - Persistent, Bioaccumulative and Toxic  
 RID - Regulation concerning the International Carriage of Dangerous Goods by Rail  
 STV - Short Term Value  
 SVHC - Substances of Very High Concern  
 vPvB - very Persistent, very Bioaccumulative

### R-phrases

R34	Causes burns.
R37	Irritating to respiratory system.

### S-phrases

S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
S45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

### Additional information

Indication of changes: general update

*The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.*