

## SAFETY DATA SHEET IODINE ACETONE (Liqui iodi fortis)

According to Regulation (EU) No 453/2010

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1. Product identifier

**Product name** IODINE ACETONE (Liqui iodi fortis)  
**Product No.** PL.7056, PL.7057, PL.7058

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

**Identified uses** Laboratory reagent.

#### 1.3. Details of the supplier of the safety data sheet

**Supplier** Pro-Lab Diagnostics  
3 Bassendale Road  
Wirral  
Merseyside  
CH62 3QL  
Tel: 0151 353 1613  
Fax: 0151 353 1614  
mowen@pro-lab.com

#### 1.4. Emergency telephone number

+44 (0)151 353 1613 Monday to Friday 9.00 to 17.00  
+44 (0)7714 429 646 outside the above hours

### SECTION 2: HAZARDS IDENTIFICATION

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

**Classification (1999/45/EEC)** Xi;R36. F;R11. R66, R67.

##### **Human health**

Irritating to eyes. Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness. See section 11 for additional information on health hazards.

##### **Physical and Chemical Hazards**

Highly flammable Vapours may be ignited by a spark, a hot surface or an ember.

#### 2.2. Label elements

##### **Labelling**



Irritant



Highly flammable

##### **Risk Phrases**

R11	Highly flammable
R36	Irritating to eyes.
R66	Repeated exposure may cause skin dryness or cracking.
R67	Vapours may cause drowsiness and dizziness.

##### **Safety Phrases**

S9	Keep container in a well-ventilated place.
S16	Keep away from sources of ignition - No smoking.
S25	Avoid contact with eyes.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S37	Wear suitable gloves.
S51	Use only in well-ventilated areas.
S60	This material and its container must be disposed of as hazardous waste.

#### 2.3. Other hazards

# IODINE ACETONE (Liqui iodi fortis)

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2. Mixtures

<b>ACETONE</b>	<b>60-100%</b>
<b>CAS-No.: 67-64-1</b>	<b>EC No.: 200-662-2</b>
Classification (EC 1272/2008) Flam. Liq. 2 - H225 EUH066 Eye Irrit. 2 - H319 STOT SE 3 - H336	Classification (67/548/EEC) F;R11 Xi;R36 R66 R67
<b>ETHANOL</b>	<b>1-5%</b>
<b>CAS-No.: 64-17-5</b>	<b>EC No.: 200-578-6</b>
Classification (EC 1272/2008) Flam. Liq. 2 - H225	Classification (67/548/EEC) F;R11
<b>IODINE</b>	<b>&lt; 1%</b>
<b>CAS-No.: 7553-56-2</b>	<b>EC No.: 231-442-4</b>
Classification (EC 1272/2008) Acute Tox. 4 - H312 Acute Tox. 4 - H332 Aquatic Acute 1 - H400	Classification (67/548/EEC) Xn;R20/21 N;R50
<b>METHANOL</b>	<b>&lt; 1%</b>
<b>CAS-No.: 67-56-1</b>	<b>EC No.: 200-659-6</b>
Classification (EC 1272/2008) Flam. Liq. 2 - H225 Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 3 - H331 STOT SE 1 - H370	Classification (67/548/EEC) F;R11 T;R23/24/25,R39/23/24/25

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

#### Inhalation

Move into fresh air and keep at rest. Get medical attention if any discomfort continues.

#### Ingestion

NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! DO NOT induce vomiting. Get medical attention immediately. Immediately rinse mouth and provide fresh air.

#### Skin contact

Promptly wash contaminated skin with soap or mild detergent and water. Promptly remove clothing if soaked through and wash as above. Get medical attention promptly if symptoms occur after washing.

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## Eye contact

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Contact physician if irritation persists.

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

### Inhalation.

Vapours may cause headache, fatigue, dizziness and nausea.

### Ingestion

May cause discomfort if swallowed. May cause stomach pain or vomiting.

### Skin contact

Prolonged contact may cause redness, irritation and dry skin.

### Eye contact

May irritate eyes.

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

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

## **SECTION 5: FIREFIGHTING MEASURES**

### **5.1. Extinguishing media**

#### Extinguishing media

Extinguish with alcohol-resistant foam, carbon dioxide or dry powder.

#### Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

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

#### Hazardous combustion products

During fire, toxic gases (CO, CO<sub>2</sub>) are formed.

#### Unusual Fire & Explosion Hazards

May travel considerable distance to source of ignition and flash back.

#### Specific hazards

Vapours may be ignited by a spark, a hot surface or an ember. Fire creates: Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

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

#### Special Fire Fighting Procedures

Move container from fire area if it can be done without risk. Water spray should be used to cool containers. Be aware of danger for fire to re-start.

#### Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

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

Wear protective clothing as described in Section 8 of this safety data sheet.

### **6.2. Environmental precautions**

Avoid discharge to the aquatic environment.

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

Wear necessary protective equipment. Remove sources of ignition. Stop leak if possible without risk. DO NOT touch spilled material!

Ventilate well. Absorb in vermiculite, dry sand or earth and place into containers. Flush with plenty of water to clean spillage area.

### **6.4. Reference to other sections**

Wear protective clothing as described in Section 8 of this safety data sheet. See section 11 for additional information on health hazards.

For waste disposal, see section 13.

## **SECTION 7: HANDLING AND STORAGE**

### **7.1. Precautions for safe handling**

Read and follow manufacturer's recommendations. Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact. Static electricity and formation of sparks must be prevented. Avoid eating, drinking and smoking when using the product. Wash hands after handling.

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

Keep away from heat, sparks and open flame. Store in a cool and well-ventilated place. Keep in original container. Ground container and transfer equipment to eliminate static electric sparks.

### Storage Class

Flammable liquid storage.

## 7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
ACETONE	WEL	500 ppm	1210 mg/m <sup>3</sup>	1500 ppm	3620 mg/m <sup>3</sup>	
ETHANOL	WEL	1000 ppm	1920 mg/m <sup>3</sup>			
IODINE	WEL			0 ppm	1 mg/m <sup>3</sup>	
METHANOL	WEL	200 ppm	266 mg/m <sup>3</sup>	250 ppm	333 mg/m <sup>3</sup>	Sk

WEL = Workplace Exposure Limit.

Sk = Can be absorbed through skin.

### 8.2. Exposure controls

#### Protective equipment



#### Hand protection

Use protective gloves. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

#### Eye protection

Wear approved safety goggles.

#### Other Protection

Provide eyewash station.

#### Hygiene measures

DO NOT SMOKE IN WORK AREA! Promptly remove any clothing that becomes contaminated. Wash promptly with soap & water if skin becomes contaminated. When using do not eat, drink or smoke.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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

Appearance	Liquid
Colour	Dark brown.
Odour	Characteristic.
Solubility	Soluble in water.
Flash point	~ -17°C CC (Closed cup).

### 9.2. Other information

Not determined.

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

Oxidising materials.

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## 10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

## 10.3. Possibility of hazardous reactions

### **Hazardous Polymerisation**

Will not polymerise.

## 10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition. Avoid contact with strong oxidisers.

## 10.5. Incompatible materials

### **Materials To Avoid**

Strong oxidising substances.

## 10.6. Hazardous decomposition products

During fire, toxic gases (CO, CO<sub>2</sub>) are formed.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

#### **Inhalation**

Vapours may cause drowsiness and dizziness.

#### **Ingestion**

May cause discomfort if swallowed. May cause stomach pain or vomiting. May cause nausea, headache, dizziness and intoxication.

#### **Skin contact**

Repeated exposure may cause skin dryness or cracking.

#### **Eye contact**

Irritating to eyes.

#### Toxicological information on ingredients.

#### IODINE (CAS: 7553-56-2)

##### Acute toxicity:

##### **Acute Toxicity (Oral LD50)**

Data lacking.

REACH dossier information

##### **Acute Toxicity (Dermal LD50)**

> 2000 mg/kg Rabbit

REACH dossier information

##### **Acute Toxicity (Inhalation LC50)**

> 4.588 mg/l (dust/mist) Rat 4 hours

REACH dossier information

#### METHANOL (CAS: 67-56-1)

##### Acute toxicity:

##### **Acute Toxicity (Oral LD50)**

> 1187 mg/kg Rat

REACH dossier information

##### **Acute Toxicity (Inhalation LC50)**

> 115.9 mg/l (vapours) Rat 4 hours

REACH dossier information

## IODINE ACETONE (Liqui iodi fortis)

ETHANOL (CAS: 64-17-5)

**Acute toxicity:**

**Acute Toxicity (Oral LD50)**

10470 mg/kg Rat

REACH dossier information

**Acute Toxicity (Inhalation LC50)**

116.9 mg/l (vapours) Rat 4 hours

REACH dossier information

ACETONE (CAS: 67-64-1)

**Acute toxicity:**

**Acute Toxicity (Oral LD50)**

5800 mg/kg Rat

REACH dossier information

**Acute Toxicity (Dermal LD50)**

> 1580 mg/kg Rabbit

REACH dossier information

**Acute Toxicity (Inhalation LC50)**

76 mg/l (vapours) Rat 4 hours

REACH dossier information

## SECTION 12: ECOLOGICAL INFORMATION

**Ecotoxicity**

The product is not expected to be hazardous to the environment.

**12.1. Toxicity**

## IODINE ACETONE (Liqui iodi fortis)

### Ecological information on ingredients.

#### IODINE (CAS: 7553-56-2)

##### **Acute Toxicity - Fish**

LC50 96 hours 1.67 mg/l Onchorhynchus mykiss (Rainbow trout)

REACH dossier information

##### **Acute Toxicity - Aquatic Invertebrates**

LC50 48 hours 0.55 mg/l Daphnia magna

REACH dossier information

##### **Acute Toxicity - Aquatic Plants**

EC50 72 hours 0.13 mg/l Freshwater algae

REACH dossier information

#### METHANOL (CAS: 67-56-1)

96 hours 15400 mg/l Lepomis macrochirus (Bluegill)

REACH dossier information

##### **Acute Toxicity - Aquatic Invertebrates**

EC50 48 hours > 10000 mg/l Daphnia magna

REACH dossier information

##### **Acute Toxicity - Aquatic Plants**

EC50 96 hours ~ 22000 mg/l Freshwater algae

REACH dossier information

#### ETHANOL (CAS: 64-17-5)

##### **Acute Toxicity - Fish**

LC50 96 hours 14.2 mg/l Pimephales promelas (Fat-head Minnow)

REACH dossier information

##### **Acute Toxicity - Aquatic Invertebrates**

EC50 48 hours 5012 mg/l Daphnia magna

REACH dossier information

##### **Acute Toxicity - Aquatic Plants**

EC50 72 hours 275 mg/l Freshwater algae

REACH dossier information

#### ACETONE (CAS: 67-64-1)

##### **Acute Toxicity - Fish**

LC50 96 hours 5540 mg/l Onchorhynchus mykiss (Rainbow trout)

REACH dossier information

##### **Acute Toxicity - Aquatic Invertebrates**

EC50 48 hours 12700 mg/l Daphnia magna

REACH dossier information

##### **Acute Toxicity - Aquatic Plants**

NOEC 192 hours 530 mg/l Microcystis aeruginosa

REACH dossier information

### 12.2. Persistence and degradability

#### **Degradability**

There are no data on the degradability of this product.

## IODINE ACETONE (Liqui iodi fortis)

### Ecological information on ingredients.

#### **Biodegradation**

Scientifically unjustified.  
REACH dossier information

IODINE (CAS: 7553-56-2)

#### **Biodegradation**

Water Degradation (71.5%) 5 days  
REACH dossier information  
Degradation (95%) 20 days  
REACH dossier information

METHANOL (CAS: 67-56-1)

#### **Biodegradation**

Water Degradation (96%) 20 days  
REACH dossier information

ETHANOL (CAS: 64-17-5)

#### **Biodegradation**

Water and Sediment Degradation (90%) 28 days  
REACH dossier information  
The substance is readily biodegradable.

ACETONE (CAS: 67-64-1)

### **12.3. Bioaccumulative potential**

#### **Bioaccumulative potential**

No data available on bioaccumulation.

### Ecological information on ingredients.

#### **Bioaccumulation factor**

Scientifically unjustified.  
REACH dossier information

IODINE (CAS: 7553-56-2)

#### **Bioaccumulative potential**

Will not bio-accumulate.

ACETONE (CAS: 67-64-1)

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

#### **Mobility:**

The product is soluble in water.

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

Not determined.

### Ecological information on ingredients.

ACETONE (CAS: 67-64-1)

Not Classified as PBT/vPvB by current EU criteria.

### **12.6. Other adverse effects**

Not determined.

## SECTION 13: DISPOSAL CONSIDERATIONS

### **13.1. Waste treatment methods**

Dispose of waste and residues in accordance with local authority requirements. Recover and reclaim or recycle, if practical.

## SECTION 14: TRANSPORT INFORMATION

### **14.1. UN number**

## IODINE ACETONE (Liqui iodi fortis)

UN No. (ADR/RID/ADN)	1090
UN No. (IMDG)	1090
UN No. (ICAO)	1090

### 14.2. UN proper shipping name

Proper Shipping Name ACETONE

### 14.3. Transport hazard class(es)

ADR/RID/ADN Class	3
ADR/RID/ADN Class	Class 3: Flammable liquids.
ADR Label No.	3
IMDG Class	3
ICAO Class/Division	3
Transport Labels	



### 14.4. Packing group

ADR/RID/ADN Packing group	II
IMDG Packing group	II
ICAO Packing group	II

### 14.5. Environmental hazards

### 14.6. Special precautions for user

EMS	F-E, S-D
Emergency Action Code	•2YE
Hazard No. (ADR)	33
Hazard No. (ADR)	33 Highly flammable liquid (flash-point below 23°C).
Tunnel Restriction Code	(D/E)

### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

## SECTION 15: REGULATORY INFORMATION

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

#### Statutory Instruments

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

#### Approved Code Of Practice

Classification and Labelling of Substances and Preparations Dangerous for Supply.

#### Guidance Notes

Workplace Exposure Limits EH40.

#### EU Legislation

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 with amendments.

### 15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

# IODINE ACETONE (Liqui iodi fortis)

## SECTION 16: OTHER INFORMATION

### Revision Comments

Supplier's contact details amended. Reissued according to Regulation (EU) No 453/2010.

**Revision Date** 11-2011

**Revision** 3

**Supersedes date** 02-2010

### Risk Phrases In Full

R20/21 Harmful by inhalation and in contact with skin.  
R11 Highly flammable  
R36 Irritating to eyes.  
R66 Repeated exposure may cause skin dryness or cracking.  
R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.  
R39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.  
R67 Vapours may cause drowsiness and dizziness.  
R50 Very toxic to aquatic organisms.

### Hazard Statements In Full

H370 Causes damage to organs <<Organs>>.  
H319 Causes serious eye irritation.  
H332 Harmful if inhaled.  
H312 Harmful in contact with skin.  
H225 Highly flammable liquid and vapour.  
H336 May cause drowsiness or dizziness.  
EUH066 Repeated exposure may cause skin dryness or cracking.  
H331 Toxic if inhaled.  
H301 Toxic if swallowed.  
H311 Toxic in contact with skin.  
H400 Very toxic to aquatic life.

### Disclaimer

The information in this safety data sheet was obtained from current and reliable sources. However, the data is provided without warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions for use, handling, storage and disposal of this product are beyond Pro-Lab Diagnostics control, it is the users responsibility to perform thorough testing of this product when used in combination with any other product. It is suggested that users familiarise themselves with this safety data sheet before handling the product.