

Issue date: 20 June 2012  
Revision: 5  
Supersedes/Cancel: 01 December 2010

# SAFETY DATA SHEET



## ISOPROPYL ALCOHOL

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

#### 1.1 Product identifier

Trade name: ISOPROPYL ALCOHOL – (PN 3310, 3311, 4605, 4625, 6350)

Registration number: 01-2119457558-25-0000

propan-2-ol

Substance name: IPA

Substance No.: 200-661-7, 67-63-0

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

Use of the Substance/Mixture

Versatile cleaner designed for use in production facilities. Industrial use, solvents, process control substances, raw material for cleaning agents and disinfectant, raw material for photo-chemicals.

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

QTEK Manufacturing Ltd.,  
Riverside Commercial Estate,  
Galway,  
Ireland.  
Email: sales@qtek.com

**Contact Person:** SDS Contact: sales@qtek.com

#### 1.4 Emergency telephone number

Telephone Number: + (353) 91 745160

Fax Number: + (353) 91 751299

Hours of business (Monday to Friday): 0830 – 1730 hrs.

Closed Bank Holidays and Public Holidays

### 2. Hazards Identification

#### 2.1 Classification of the substance or mixture

##### Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 2

Eye irritation, Category 2

Specific target organ toxicity - single exposure, Category 3, Central nervous system

H225: Highly flammable liquid and vapour.

H319: Causes serious eye irritation.

H336: May cause drowsiness or dizziness

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## Classification (67/548/EEC, 1999/45/EC)

Highly flammable

R11: Highly flammable.

Irritant

R36: Irritating to eyes.

R67: Vapours may cause drowsiness and dizziness

## 2.2 Label elements

### Labelling (REGULATION (EC) No 1272/2008)

#### Hazard pictograms :



#### Signal word :

Danger

#### Hazard statements:

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

#### Precautionary statements: Prevention:

P243 Take precautionary measures against static discharge.

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

P271 Use only outdoors or in a well-ventilated area.

#### Response:

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

## 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Chemical Name	CAS-No. EINECS-No. / ELINCS No.	content [%]
propan-2-ol; isopropyl alcohol; isopropanol	67-63-0 200-661-7	>99.90%

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## 4: FIRST AID MEASURES

### 4.1 Description of first aid measures

General advice:	Take off contaminated clothing and shoes immediately.
If inhaled:	Move to fresh air.
In case of skin contact:	Wash off with plenty of water.
In case of eye contact:	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed:	Drink plenty of water. Do NOT induce vomiting. Obtain medical attention.

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

Risks:	No information available.
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### 4.3 Indication of any immediate medical attention and special treatment needed

Treatment:	For specialist advice physicians should contact the Poisons Information Service.
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## 5: FIRE FIGHTING MEASURES

### 5.1 Extinguishing media

Suitable extinguishing media :	Water spray Alcohol-resistant foam Carbon dioxide (CO <sub>2</sub> ) Dry powder
Unsuitable extinguishing: Media	High volume water jet

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

Specific hazards during fire fighting :	No information available.
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### 5.3 Advice for firefighters

Further information:	Use water spray to cool unopened containers.
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## 6: ACCIDENTAL RELEASE MEASURES

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

Personal precautions:	Ensure adequate ventilation. Keep away from sources of ignition - No smoking.
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### 6.2 Environmental precautions

Environmental precautions:	Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system.
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## 6.3 Methods and materials for containment and cleaning up

Methods for cleaning up: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

## 6.4 Reference to other sections

For personal protection see section 8.

## 7: HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Advice on safe handling : Ensure adequate ventilation.  
Vapours are heavier than air and may spread along floors.

Advice on protection against:  
fire and explosion Keep away from sources of ignition - No smoking.  
Vapours may form explosive mixtures with air.  
Do not allow to enter drains (danger of explosion).  
Take precautionary measures against static discharges.

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

Requirements for storage areas and containers Keep container tightly closed.  
Store between 5 and 25 °C in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.  
German storage class : 3 Flammable Liquids

### 7.3 Specific end uses

Consult the technical guidelines for the use of this substance/mixture.

## 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control parameters

Components	CAS-No.	Value	Control parameters	Update	Basis
Isopropanol	67-63-0	TWA	200 ppm	2007	IR_OEL
		STEL	400 ppm	2007	IR_OEL
		TWA (15 mins)	500 ppm - 1250 mg/m <sup>3</sup>		WEL-UK
		TWS (8 hrs)	400 ppm - 999 mg/m <sup>3</sup>		WEL-UK
		Odour threshold	100 ppm - 245 mg/m <sup>3</sup>		

DNEL : End Use: Workers  
propan-2-ol; isopropyl alcohol; isopropanol  
Exposure routes: Skin contact  
Potential health effects: Chronic effects  
Exposure time: 1 d  
Value: 888 mg/kg

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PNEC propan-2-ol; isopropyl alcohol; isopropanol	:	End Use: Workers Exposure routes: Inhalation Potential health effects: Chronic effects Value: 500 mg/m <sup>3</sup>
	:	End Use: Consumers Exposure routes: Skin contact Potential health effects: Chronic effects Exposure time: 1 d Value: 319 mg/kg
	:	End Use: Consumers Exposure routes: Inhalation Potential health effects: Chronic effects Value: 89 mg/m <sup>3</sup>
	:	End Use: Consumers Exposure routes: Ingestion Potential health effects: Chronic effects Exposure time: 1 d Value: 26 mg/kg
	:	Fresh water Value: 140,9 mg/l
	:	Marine water Value: 140,9 mg/l
	:	Fresh water sediment Value: 552 mg/kg
	:	Marine sediment Value: 552 mg/kg
	:	Soil Value: 28 mg/kg

## Personal protective equipment

Respiratory protection	No personal respiratory protective equipment normally required. In inadequately ventilated areas, where workplace limits are exceeded, where unpleasant odours exist or where aerosols are in use, or smoke and mist occur, use self-contained breathing apparatus or breathing apparatus with a type A filter or appropriate combined filter (e.g. where aerosols are in use, or smoke and mist occur, A-P2 or ABEK-P2), in compliance with EN 141.
Eye protection:	Tightly fitting safety goggles (EN 166)

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Hand:	Normal length chemical-mechanical resistant gloves (EN374/EN388) Glove Material: butyl rubber Breakthrough time: $\geq$ 480 min Thickness: 0.5 mm
Hygiene measures:	Take off all contaminated clothing immediately.
Protective measures:	Avoid contact with the skin and the eyes. Do not breathe vapours or spray mist.

## Environmental exposure controls

General advice:	Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system.
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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance	:	liquid
Colour	:	colourless
Odour	:	alcohol-like
pH	:	not applicable
Melting point/range	:	-89 °C
Boiling point/boiling range	:	82 °C, 1.013 hPa
Flash point	:	12 °C
Lower explosion limit	:	2 %(V)
Upper explosion limit	:	12 %(V)
Vapour pressure	:	42 hPa, 20 °C
60.2 hPa, 25 °C	:	
Density	:	0,7855 g/cm <sup>3</sup> , 20 °C
Water solubility	:	completely miscible
Partition coefficient	:	noctanol/water
	:	log Pow: 0,05, 25 °C, (literature value)
Autoignition temperature	:	> 399 °C
Ignition temperature	:	425 °C
Thermal decomposition	:	No decomposition if used as directed.
Viscosity, dynamic	:	2.5 mPas, 20 °C 2.1 mPas, 25 °C
Explosive properties	:	Not explosive

### 9.2 Other information

Oxidising potential	:	no data available
Refractive index	:	1,376 - 1,378, 20 °C

## 10: STABILITY AND REACTIVITY

10.1 Reactivity	no data available
10.2 Chemical stability	no data available

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## 10.3 Possibility of hazardous reactions

Hazardous reactions : Vapours may form explosive mixture with air.

## 10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

## 10.5 Incompatible materials

Materials to avoid : no data available

## 10.6 Hazardous decomposition products

Hazardous decomposition products : No decomposition if stored normally.

## 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

Further information : no data available

#### Components:

#### **propan-2-ol; isopropyl alcohol; isopropanol :**

Acute oral toxicity : LD50: > 2.000 mg/kg, rat, GLP: no, (literature value)

Acute dermal toxicity : LD50: > 2.000 mg/kg, rabbit, GLP: no, (literature value)

Skin corrosion/irritation : rabbit, Result: not irritating, GLP: no, (literature value)

Serious eye damage/eye irritation : rabbit, Result: irritating, GLP: no, (literature value)

Respiratory or skin sensitization : Buehler Test, guinea pig, Result: not sensitizing, GLP : no, (literature value)

Germ cell mutagenicity

Genotoxicity in vitro : Ames test, Salmonella typhimurium, with and without, Result : nor mutagenic, GLP: no, (literature value)

## 12: ECOLOGICAL INFORMATION

### 12.1 Toxicity

#### **Components:**

#### **propan-2-ol; isopropyl alcohol; isopropanol :**

Toxicity to fish : LC50: > 100 mg/l, 48 h, Leuciscus idus melanotus, static, GLP: no, (literature value)

Toxicity to daphnia and other aquatic invertebrates. EC50: > 100 mg/l, 48 h, Daphnia magna, static test, GLP: no, (literature value)

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Toxicity to algae

EC50: > 100 mg/l, 72 h, Scenedesmus subspicatus, static test,  
GLP: no,  
(literature value)

## 12.2 Persistence and degradability

### Components:

#### propan-2-ol; isopropyl alcohol; isopropanol :

Biodegradability : aerobic, > 70 %, Result: Readily biodegradable., Exposure time: 10 d, content: 7 mg/l, GLP: no, (literature value)

## 12.3 Bioaccumulative potential

## 12.4 Mobility in soil

## 12.5 Results of PBT and vPvB assessment

### Components:

#### propan-2-ol; isopropyl alcohol; isopropanol :

Assessment: This substance is not considered to be persistent, bioaccumulating nor toxic (PBT). This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

## 12.6 Other adverse effects

### Product:

Additional ecological information : no data available

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

#### **Product:**

Following pre-treatment and observing the regulations for hazardous wastes, it must be taken to a permitted hazardous wastes landfill or hazardous wastes incinerator.

**Contaminated packaging** : Can be used after re-conditioning.

## SECTION 14: TRANSPORT INFORMATION

### 14.1 UN number

ADR : 1219  
RID : 1219  
IMDG : 1219  
IATA : 1219

### 14.2 Proper shipping name

ADR : ISOPROPYL ALCOHOL, ISOPROPANOL  
RID : ISOPROPYL ALCOHOL, ISOPROPANOL  
IMDG : ISOPROPYL ALCOHOL, ISOPROPANOL  
IATA : ISOPROPANOL



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## 14.3 Transport hazard class

<b>ADR</b>	:	3
<b>RID</b>	:	3
<b>IMDG</b>	:	3
<b>IATA</b>	:	3

## 14.4 Packing group

### ADR

Packaging group	:	II
Classification Code	:	F1
Hazard identification No	:	33
Labels	:	3
Tunnel restriction code	:	(D/E)

### RID

Packaging group	:	II
Classification Code	:	F1
Hazard identification No	:	33
Labels	:	3

### IMDG

Packaging group	:	II
Labels	:	3
EmS Number	:	F-E, S-D

### IATA

Packing instruction (cargo aircraft)	:	307
Packaging group	:	II
Labels	:	3

## 14.5 Environmental hazards

### ADR

Environmentally hazardous	:	no
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### RID

Environmentally hazardous	:	no
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### IMDG

Marine pollutant	:	no
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### IATA

Environmentally hazardous	:	no
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## 14.6 Special precautions for user

no data available

## 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Pollution category : Z

## 15: REGULATORY INFORMATION

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

Major Accident Hazard : 96/82/EC  
Legislation : Highly flammable  
Quantity 1: 5.000 t  
Quantity 2: 50.000 t

#### Notification status

EINECS : On the inventory, or in compliance with the inventory  
TSCA : On TSCA Inventory  
AUSTR : On the inventory, or in compliance with the inventory  
DSL : All components of this product are on the Canadian DSL list.  
ENCS : On the inventory, or in compliance with the inventory  
KOREA : On the inventory, or in compliance with the inventory  
PHIL : On the inventory, or in compliance with the inventory  
CHINA : On the inventory, or in compliance with the inventory  
ISHL : On the inventory, or in compliance with the inventory  
NZIOC : On the inventory, or in compliance with the inventory

### 15.2 Chemical Safety Assessment

A Chemical Safety Assessment has been carried out for this substance.

## SECTION 16: OTHER INFORMATION

This revision was updated from previous revision to incorporate requirements of REACH Regulation 1907/2006, CLP Regulation 1272/2008 and Safety Data Sheet format changes as per Annex II of REACH EU No 453/2010.

This revision: 5  
First issue: 03 November 1997  
Revised: 20 June 2012

#### Full text of R-phrases referred to under sections 2 and 3

R11 : Highly flammable.  
R36 : Irritating to eyes.

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R67 Vapours may cause drowsiness and dizziness.

## Full text of H-Statements referred to under sections 2 and 3.

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

## Further information

**Other information:** || Indicates updated section.

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