

Safety Data Sheet according to 1907/2006/EC, Article 31

Printing date 13.06.2008

Revision: 05.02.2008

1 Identification of the substance/preparation and of the company/undertaking

- **Trade name:** IPA
- **Manufacturer/Supplier:**
Caldic UK
Stainsby Close, Holmewood I. E.
Chesterfield, Derbyshire S42 5UG, UK
Tel. +44 1246 854111
- **Further information obtainable from:** Cel QHSE
- **Information in case of emergency:** Info centre of dangerous goods (BIG):+32(0)14.58.45.45

2 Hazards identification

· **Hazard description:**



Xi Irritant
F Highly flammable

· **Information concerning particular hazards for human and environment:**

- R 11 Highly flammable.*
- R 36 Irritating to eyes.*
- R 67 Vapours may cause drowsiness and dizziness.*

· **GHS label elements**



2.6/2 - Highly flammable liquid and vapour.



- 3.3/2A - Causes serious eye irritation.*
- 3.8/3 - May cause drowsiness or dizziness.*

· **Prevention:**

- Keep away from heat/sparks/open flames/hot surfaces. - No smoking.*
- Keep container tightly closed.*
- Ground/bond container and receiving equipment.*
- Use explosion-proof electrical/ventilating/lighting/ equipment.*
- Use only non-sparking tools.*
- Take precautionary measures against static discharge.*
- Avoid breathing dust/fume/gas/mist/vapours/spray.*
- Wash thoroughly after handling.*
- Use only outdoors or in a well-ventilated area.*
- Wear protective gloves/protective clothing/eye protection/face protection.*

· **Response:**

- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.*
- IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.*
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*
- Call a POISON CENTER or doctor/physician if you feel unwell.*
- If eye irritation persists: Get medical advice/attention.*
- In case of fire: Use for extinction: CO2, powder or water spray.*

· **Storage:**

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

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Store locked up.

· **Disposal:**

Dispose of contents/container in accordance with local/regional/national/international regulations.

3 Composition/information on ingredients

· **Chemical characterization:**

· **CAS No. Description**

67-63-0 propan-2-ol

· **Identification number(s)**

· **EINECS Number:** 200-661-7

· **EU Number:** 603-117-00-0

4 First-aid measures

· **General information:** Immediately remove any clothing soiled by the product.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:**

Wash with water and acidic soap.

If skin irritation continues, consult a doctor.

· **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

· **After swallowing:**

Do not induce vomiting; call for medical help immediately.

Rinse out mouth and then drink plenty of water.

· **Information for doctor:**

· **The following symptoms may occur:**

Headache

Dizziness

5 Fire-fighting measures

· **Suitable extinguishing agents:**

Water haze

Alcohol resistant foam

Carbon dioxide

Fire-extinguishing powder

· **For safety reasons unsuitable extinguishing agents:** Water with full jet

· **Special hazards caused by the substance, its products of combustion or resulting gases:**

Carbon monoxide (CO)

· **Protective equipment:** Wear self-contained respiratory protective device.

· **Additional information** Cool endangered receptacles with water spray.

6 Accidental release measures

· **Person-related safety precautions:**

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Keep away from ignition sources.

· **Measures for environmental protection:**

Prevent seepage into sewage system, workpits and cellars.

Do not allow to enter sewers/ surface or ground water.

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- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.

7 Handling and storage

- **Handling:**
- **Information for safe handling:** Work only in fume cupboard.
- **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:**
Store away from oxidizing agents.
Do not store together with acids.
- **Further information about storage conditions:**
Keep container tightly sealed.
Store in cool, dry conditions in well sealed receptacles.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

- **Ingredients with limit values that require monitoring at the workplace:**

67-63-0 propan-2-ol

OES	Short-term value: 1250 mg/m ³ , 500 ppm
	Long-term value: 999 mg/m ³ , 400 ppm

- **Additional information:** The lists valid during the making were used as basis.

- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.
- **Respiratory protection:**
Use suitable respiratory protective device in case of insufficient ventilation.
Filter A/P2
- **Protection of hands:**



Protective gloves

- **Material of gloves**
Nitrile rubber, NBR
Recommended thickness of the material: ≥ 0.35 mm
Butyl rubber, BR
- **Penetration time of glove material**
For the mixture of chemicals mentioned below the penetration time has to be at least 480 minutes (Permeation according to EN 374 Part 3: Level 6).

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· **Eye protection:**



Tightly sealed goggles

· **Body protection:** Protective work clothing

9 Physical and chemical properties

· **General Information**

Form: Fluid
Colour: Clear
Odour: Alcohol-like

· **Change in condition**

Melting point/Melting range: -89°C
Boiling point/Boiling range: 82-83°C

· **Flash point:** 12°C
· **Auto-ignition temperature:** 425°C

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

· **Explosion limits:**

Lower: 2 Vol %
Upper: 12 Vol %

· **Vapour pressure at 20°C:** 41 hPa

· **Density at 20°C:** 0.785 g/cm³
· **Vapour density at 20°C:** 2 g/cm³

· **Solubility in / Miscibility with water:** Fully miscible.

· **Viscosity:**
Dynamic at 20°C: 2.43 mPas

10 Stability and reactivity

· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

· **Dangerous reactions**

Reacts with strong oxidizing agents.
Reacts with strong acids.

· **Dangerous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

· **Acute toxicity:**

· **LD/LC50 values relevant for classification:**

Oral	LD50	>2000 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rabbit)

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Inhalative LC50/4 h >20 mg/l (rat)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.

12 Ecological information

- **Information about elimination (persistence and degradability):**
- **Other information:** The product is easily biodegradable.
- **Behaviour in environmental systems:**
- **Mobility and bioaccumulation potential:** Not worth-mentioning accumulating in organisms
- **Ecotoxic effects:**

· **Acquatic toxicity:**

EC 50 (48 u)	>100 mg/l (daphnia magna)
EC 50 (72u)	>100 mg/l (Scenedesmus subspicatus)
LC 50 (48 u)	>100 mg/l (Leuciscus idus)

- **General notes:** Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water

13 Disposal considerations

- **Product:**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

· **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 3 Flammable liquids.
- **Danger code (Kemler):** 33
- **UN-Number:** 1219
- **Packaging group:** II
- **Hazard label** 3
- **Description of goods:** 1219 ISOPROPANOL (ISOPROPYL ALCOHOL)

· **Maritime transport IMDG:**



- **IMDG Class:** 3

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- **UN Number:** 1219
- **Label** 3
- **Packaging group:** II
- **EMS Number:** F-E,S-D
- **Marine pollutant:** No
- **Proper shipping name:** ISOPROPANOL (ISOPROPYL ALCOHOL)

· **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 3
- **UN/ID Number:** 1219
- **Label** 3
- **Packaging group:** II
- **Proper shipping name:** ISOPROPANOL (ISOPROPYL ALCOHOL)

· **UN "Model Regulation":** UN1219; ISOPROPANOL (ISOPROPYL ALCOHOL); 3; II

15 Regulatory information

- **Labelling according to EU guidelines:**
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
- **Code letter and hazard designation of product:**
Xi Irritant
F Highly flammable
- **Risk phrases:**
11 Highly flammable.
36 Irritating to eyes.
67 Vapours may cause drowsiness and dizziness.
- **Safety phrases:**
7 Keep container tightly closed.
16 Keep away from sources of ignition - No smoking.
24/25 Avoid contact with skin and eyes.
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

· **National regulations:**

· **Technical instructions (air):**

Class	Share in %
III	100.0

· **Waterhazard class:** Water hazard class 1 (Assessment by list): slightly hazardous for water.

16 Other information

" The information provided in these documents is based on our present state of knowledge of the product and is given in good faith and to the best of our experience. However, it should not be construed as a technical specification or as guaranteeing specific properties. In no event we will be responsible for damages or effects of any nature whatsoever, either express or implied, resulting from the use of this information. It is the own responsibility of the consignee and the user of the product to comply with all prevailing and applicable laws, regulations and directives. They should also make their own determination as to the suitability of the

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product for a particular use or application."

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises Dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement internationale concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

GB