

SAFETY DATA SHEET

Creation Date 01-Sep-2009 Revision Date 12-Mar-2014 Revision Number 1



Precautionary Statements

Prevention

Keep cool

Wash face, hands and any exposed skin thoroughly after handling
Do not breathe dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
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
Wear protective gloves/protective clothing/eye protection/face protection

Most important symptoms/effects Breathing difficulties. May cause central nervous system depression: Symptoms of

overexposure may be headache, dizziness, tiredness, nausea and vomiting: Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness,

nausea and vomiting

Notes to Physician Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media CO 2, dry chemical, dry sand, alcohol-resistant foam. Cool closed containers exposed to fire

with water spray.

Unsuitable Extinguishing Media Water may be ineffective

Flash Point 12 °C / 53.6 °F

Method - Abel Closed Cup (BS 2000 Part 170, IP 170, AS/NZS 2106)

Autoignition Temperature 425 °C / 797 °F

Explosion Limits

Upper 12 vol % **Lower** 2 vol %

Sensitivity to Mechanical Impact No information available Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Flammable. Risk of ignition. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Containers may explode when heated.

Isopropanol,	, Molecular	Biology Grade
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8. Exposure controls / personal protection

Exposure Guidelines

9. Physical and chemical properties

Physical State

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VOC Content(%) 59.9 % (EC/1999/13)

Refractive index 1.377 at 20 °C / 68 °F (ASTM D-1218)

Surface tension 22.7 mN/m at 20 $^{\circ}$ C / 68 $^{\circ}$ F

Coefficient of expansion 0.0009 / °C

Dielectric constant 18.6 at 20 °C / 68 °F

Heat of vapourisation 665 J/g

Specific heat capacity3 kJ/kg °C at 20 °C / 68 °FThermal conductivity0.137 W/m °C at 20 °C / 68 °F

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Stable under normal conditions.

Conditions to Avoid Heat, flames and sparks. Keep away from open flames, hot surfaces and sources of

ignition.

Incompatible Materials Strong oxidizing agents, Acids, Halogens, Acid anhydrides

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO₂), peroxides

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

11. Toxicological information

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delayed

Symptoms / effects,both acute and May cause central nervous system depression: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: Inhalation of high vapor

concentrations may cause symptoms like headache, dizziness, tiredness, nausea and

vomiting

Endocrine Disruptor Information

No information available

Other Adverse Effects

See actual entry in RTECS for complete information.

12. Ecological information

Ecotoxicity

. Do not empty into drains.

Component Isopropyl alcohol

Freshwater Algae 1000 mg/L EC50 > 72 h 1000 mg/L EC50 > 96 h

Freshwater Fish 1400000 µg/L LC50 96 h 11130 mg/L LC50 96 h 9640 mg/L LC50 96 h **Microtox**

= 35390 mg/L EC50 Photobacterium phosphoreum 5 min **Water Flea**

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200-661-7

Isopropyl alcohol

Legend:
X - Listed
E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

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Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

WHMIS Hazard Class

B2 Flammable liquid D2B Toxic materials



16. Other information