

**SAFETY DATA SHEET**

Revision Date: 04/18/2013  
Print Date: 6/19/2013  
MSDS Number: 100000002859  
Version: 1.0

ISOPROPANOL 99%  
20290

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

Nexeo Solutions	Regulatory Information Number	1-855-429-2661
PO Box 2458	Telephone	1-855-429-2661
Columbus, OH 43216	Emergency telephone number	1-855-639-3648

Product name                      ISOPROPANOL 99%

Product code                      20290

**2. HAZARDS IDENTIFICATION****Emergency Overview**

Appearance: liquid, colourless

WARNING! FLAMMABLE LIQUID AND VAPOR. MAY AFFECT THE CENTRAL NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. MAY CAUSE EYE IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY THE SKIN AND CAUSE IRRITATION AND BURNS.

**Potential Health Effects****Exposure routes**

Inhalation, Skin absorption, Skin contact, Eye Contact, Ingestion

**Eye contact**

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

**Skin contact**



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Unlikely to cause skin irritation or injury. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of skin, skin burns, and other skin damage.

### Ingestion

This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

### Inhalation

Breathing of vapor or mist is possible. It is possible to breathe this material under certain conditions of handling and use (for example, during heating, spraying, or stirring). Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful.

### Aggravated Medical Condition

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: Skin, lung (for example, asthma-like conditions), Kidney

### Symptoms

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), Lowered blood pressure, respiratory depression (slowing of the breathing rate), Lack of coordination, confusion, lung edema (fluid buildup in the lung tissue), kidney damage, coma

### Target Organs

Exposure to this material (or a component) has been found to cause kidney damage in male rats. The mechanism by which this toxicity occurs is specific to the male rat and the kidney effects are not expected to occur in humans. Breathing isopropanol vapors has caused damage to the lining of the middle ear in experimental animals. The relevance of this finding to humans is uncertain. Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects

### Carcinogenicity



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This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA).

### Reproductive hazard

This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. The relevance of these findings to humans is uncertain.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components	CAS-No. / trade secret no.	Concentration
Isopropyl alcohol	67-63-0	90 - 100%

## 4. FIRST AID MEASURES

### Eyes

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention. Remove contact lenses.

### Skin

First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.

### Ingestion

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended. Do NOT induce vomiting.



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### Inhalation

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

### Notes to physician

**Hazards:** Administration of high doses of isopropanol in combination with known hepatotoxic chemicals resulted in enhanced liver toxicity in experimental animals.

**Treatment:** No information available.

## 5. FIREFIGHTING MEASURES

### Suitable extinguishing media

Dry chemical, Carbon dioxide (CO<sub>2</sub>), Water spray

### Hazardous combustion products

carbon dioxide and carbon monoxide

### Precautions for fire-fighting

Material is volatile and readily gives off vapors which may travel along the ground or be moved by ventilation and ignited by pilot lights, flames, sparks, heaters, smoking, electric motors, static discharge or other ignition sources at locations near the material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). Water may be ineffective for extinguishment unless used under favorable conditions by experienced fire fighters. Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning material with water used for cooling purposes.

### NFPA Flammable and Combustible Liquids Classification

Flammable Liquid Class IB

## 6. ACCIDENTAL RELEASE MEASURES



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### Personal precautions

For personal protection see section 8. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Ensure adequate ventilation. Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Pay attention to the spreading of gases especially at ground level (heavier than air) and to the direction of the wind.

### Environmental precautions

Prevent spreading over a wide area (e.g. by containment or oil barriers). Do not let product enter drains. Do not flush into surface water or sanitary sewer system. Local authorities should be advised if significant spillages cannot be contained.

### Methods for cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

### Other information

Comply with all applicable federal, state, and local regulations. Suppress (knock down) gases/vapours/mists with a water spray jet.

## 7. HANDLING AND STORAGE

### Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Static ignition hazard can result from handling and use. Electrically bond and ground all containers, personnel and equipment before transfer or use of material. Special precautions may be necessary to dissipate static electricity for non-conductive containers. Use proper bonding and grounding during product transfer as described in National Fire Protection Association document NFPA 77.

### Storage

Store in a cool, dry, ventilated area, away from incompatible substances.

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### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Exposure Guidelines

Isopropyl alcohol		67-63-0
ACGIH	8-hour, time-weighted average	200 ppm
ACGIH	Short-term exposure limit	400 ppm
NIOSH	Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek	400 ppm
NIOSH	Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek	980 mg/m <sup>3</sup>
NIOSH	STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday	500 ppm
NIOSH	STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday	1,225 mg/m <sup>3</sup>
OSHA	8-hour time weighted average	400 ppm
OSHA	8-hour time weighted average	980 mg/m <sup>3</sup>
OSHA	8-hour time weighted average	400 ppm
OSHA	8-hour time weighted average	980 mg/m <sup>3</sup>
OSHA	Short-term exposure limit	500 ppm
OSHA	Short-term exposure limit	1,225 mg/m <sup>3</sup>

#### General advice

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect



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exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

### Exposure controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

### Eye protection

Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist.

### Skin and body protection

Wear resistant gloves (consult your safety equipment supplier).

### Respiratory protection

A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state</b>	liquid
<b>Colour</b>	colourless
<b>Odour</b>	alcohol-like
<b>Boiling point/boiling range</b>	180 °F / 82 °C
<b>Melting point/range</b>	Freezing Point -128 °F / -89 °C
<b>pH</b>	no data available
<b>Flash point</b>	54 °F / 12 °C



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<b>Evaporation rate</b>	2.9
<b>Lower explosion limit/Upper explosion limit</b>	2.0 %(V) / 12.0 %(V)
<b>Vapour pressure</b>	33.000 mmHg @ 68 °F / 20 °C
<b>Relative vapor density</b>	2.1
<b>Density</b>	0.785 g/cm <sup>3</sup> @ 68 °F / 20 °C
<b>Water solubility</b>	68 °F / 20 °C completely soluble
<b>log Pow</b>	0.05
<b>Viscosity, kinematic</b>	no data available

### 10. STABILITY AND REACTIVITY

#### Stability

Stable.

#### Conditions to avoid

Avoid contact with: Heat, flames and sparks., excessive heat

#### Incompatible products

Avoid contact with: Aldehydes, halogens, Strong acids, Strong oxidizing agents, alkalis, Amines, Ethylene oxide, halogenated hydrocarbons, isocyanates, Do not use with aluminum equipment at temperatures above 120 degrees F.

#### Hazardous decomposition products

carbon dioxide and carbon monoxide

#### Hazardous reactions

Hazardous polymerisation does not occur.

### 11. TOXICOLOGICAL INFORMATION

#### Acute oral toxicity

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Acute oral toxicity - Product : no data available

### Acute oral toxicity - Components

Isopropyl alcohol : LD50: > 5,500 mg/kg Species: rat Method: OECD Test Guideline 401 Symptoms: ataxia, decreased motor activity, bradypnea

### Acute inhalation toxicity

Acute inhalation toxicity - Product : no data available

### Acute inhalation toxicity - Components

Isopropyl alcohol : > 10,000 mg/l Exposure time: 6 h Species: rat Method: OECD Test Guideline 403 Symptoms: ataxia, labored breathing, decreased activity and muscle tone, decreased motor activity, depression

### Acute dermal toxicity

Acute dermal toxicity - Product : no data available

### Acute dermal toxicity - Components

Isopropyl alcohol : LD50: Method: OECD Test Guideline 402

### Acute toxicity (other routes of administration)

Acute toxicity (other routes of administration) : no data available

## 12. ECOLOGICAL INFORMATION

### Biodegradability



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Biodegradability - Product : no data available

Biodegradability - Components

Isopropyl alcohol : Primary biodegradation 53 %

### Bioaccumulation

Bioaccumulation - Product : no data available

### Ecotoxicity effects

#### Toxicity to fish

Toxicity to fish - Product : no data available

### Toxicity to daphnia and other aquatic invertebrates

Toxicity to daphnia and other aquatic invertebrates  
 - Product : no data available

### Toxicity to algae

Toxicity to algae - Product : no data available

### Toxicity to bacteria

Toxicity to bacteria - Product : no data available

## 13. DISPOSAL CONSIDERATIONS

### Waste disposal methods

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Dispose of in accordance with all applicable local, state and federal regulations. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact NEXEO's Environmental Services Group at 800-637-7922.

### 14. TRANSPORT INFORMATION

#### REGULATION

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.
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#### U.S. DOT - ROAD

UN 1219	Isopropanol	3		II	
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#### U.S. DOT - RAIL

UN 1219	Isopropanol	3		II	
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#### U.S. DOT - INLAND WATERWAYS

UN 1219	Isopropanol	3		II	
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#### TRANSPORT CANADA - ROAD

UN 1219	Isopropanol	3		II	
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#### TRANSPORT CANADA - RAIL

UN 1219	Isopropanol	3		II	
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#### TRANSPORT CANADA - INLAND WATERWAYS

UN 1219	Isopropanol	3		II	
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#### INTERNATIONAL MARITIME DANGEROUS GOODS

UN 1219	Isopropanol	3		II	
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#### INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

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UN	1219	Isopropanol	3	II
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**INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER**

UN	1219	Isopropanol	3	II
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**MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES**

UN	1219	Isopropanol	3	II
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\*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

**15. REGULATORY INFORMATION****California Prop. 65**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**SARA Hazard Classification**  
**SARA 311/312 Classification**

Fire Hazard  
 Acute Health Hazard

**New Jersey RTK Label Information**

Isopropyl alcohol 67-63-0

**Pennsylvania RTK Label Information**

Isopropyl alcohol 67-63-0

**Notification status**

United States TSCA Inventory	y (positive listing)
Canadian Domestic Substances List (DSL)	y (positive listing)
Australia Inventory of Chemical Substances (AICS)	y (positive listing)



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New Zealand. Inventory of Chemical Substances	y (positive listing)
Japan. ENCS - Existing and New Chemical Substances Inventory	y (positive listing)
Japan. ISHL - Inventory of Chemical Substances (METI)	y (positive listing)
Korea. Korean Existing Chemicals Inventory (KECI)	y (positive listing)
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	y (positive listing)
China. Inventory of Existing Chemical Substances in China (IECSC)	y (positive listing)

	HMIS	NFPA
Health	2	1
Flammability	3	3
Physical hazards	0	
Instability		0
Specific Hazard	--	--

### 16. OTHER INFORMATION

The information accumulated is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made become available subsequently to the date hereof, we do not assume any responsibility for the results of its use. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by NEXEO™ Solutions EHS Product Safety Department (1-855-429-2661) MSDS@nexeosolutions.com.