

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

Product name : Isobutyl nitrite

## 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture

According to Regulation (EC) No1272/2008

Flammable liquids (Category 2)

Carcinogenicity (Category 1B)

Germ cell mutagenicity (Category 2)

Acute toxicity (Category 4)

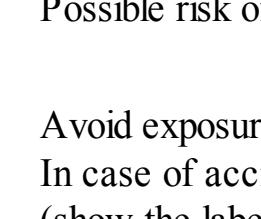
Acute toxicity (Category 4)

According to European Directive 67/548/EEC as amended.

Highly flammable. May cause cancer. Possible risk of irreversible effects. Harmful by inhalation and if swallowed.

### Label elements

Pictogram



Signal word

Danger

Hazard statement(s)

Highly flammable liquid and vapour.

H225

Harmful if swallowed.

H302

Harmful if inhaled.

H332

Suspected of causing genetic defects.

H341

May cause cancer.

H350

May cause cancer.

Precautionary statement(s)

Obtain special instructions before use.

P201

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P210

Use personal protective equipment as required.

P281

IF exposed or concerned: Get medical advice/ attention.

Hazard symbol(s)

Highly flammable

F

Toxic

R-phrase(s)

May cause cancer.

R45

Also harmful by inhalation and if swallowed.

R20/22

Highly flammable.

R11

Possible risk of irreversible effects.

R68

Avoid exposure - obtain special instructions before use.

S53

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S45

Restricted to professional users.

Other hazards - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula : C4H9NO2

Molecular Weight : 103,12 g/mol

CAS-No.	EC-No.	Classification	Concentration
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**Isobutyl nitrite**

542-56-3 208-819-7 -

Flam. Liq. 2; Carc. 1B; Mutagenicity 2;

Acute Tox. 4; H225, H302,

H332, H341, H350

F, T, Carc. Cat.2, Mut. Cat.3,

R11 - R20/22 - R45 - R68

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

### If inhaled

If breathed in, move person into fresh air. If not breathing give artificial respiration Consult a physician.

### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water.

Consult a physician.

## 5. FIRE-FIGHTING MEASURES

### Suitable extinguishing media

For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

### Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

### Further information

Use water spray to cool unopened containers.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

### Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### Methods and materials for containment and 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).

## 7. HANDLING AND STORAGE

### Precautions for safe handling

Avoid exposure - obtain special instructions before use. Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

### Conditions for safe storage

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage temperature: 2 - 8 °C

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Personal protective equipment

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Handle with gloves.

#### Eye protection

Face shield and safety glasses

#### Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

#### Hygiene measures

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form liquid

Colour yellow

### Safety data

pH no data available

Melting point no data available

Boiling point 66 - 67 °C - lit.

Flash point -21 °C - closed cup

Ignition temperature no data available

Lower explosion limit no data available

Upper explosion limit no data available

Density 0,87 g/cm3 at 25 °C

Water solubility no data available

## 10. STABILITY AND REACTIVITY

### Chemical stability

Stable under recommended storage conditions.

### Conditions to avoid

Heat, flames and sparks.

### Materials to avoid

Strong oxidizing agentsOxidizing agents, Alcohols, Strong bases

### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx)

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

LD50 Oral - rat - 410 mg/kg

Remarks: Behavioral/General anesthetic.

LC50 Inhalation - rat - 4 h - 777 ppm (including change in righting reflex). Behavioral/Excitement. Cyanosis

Remarks: Behavioral/Altered sleep time (including change in righting reflex). Behavioral/Excitement. Cyanosis

### Skin corrosion/irritation

Serious eye damage/eye irritation

no data available

no data available