

Product Name: Red Stone international co

Location: East Ahmadi Industrial Area, Block 6, Kuwait

| MUTUAL SOLVENT                                                                                                                         |                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| PRODUCT CODE                                                                                                                           | 085555                                                                              |
| SYNONYMS                                                                                                                               | 2-Butoxy ethanol Butyl cellosolve                                                   |
| C.I. NO.                                                                                                                               | N/A                                                                                 |
| CASR NO.                                                                                                                               | 111-76-2                                                                            |
| ATOMIC OR MOLECULAR FORMULA                                                                                                            | C <sub>6</sub> H <sub>14</sub> O <sub>2</sub>                                       |
| ATOMIC OR MOLECULAR WEIGHT                                                                                                             | 118.18                                                                              |
| PROPERTIES                                                                                                                             | Combustible.                                                                        |
|                                                                                                                                        |  |
| PARAMETER                                                                                                                              | LIMIT                                                                               |
| Description                                                                                                                            | A clear & colorless liquid.                                                         |
| Solubility                                                                                                                             | Miscible with water & methanol forming clear and colorless solution.                |
| Minimum assay (By GC)                                                                                                                  | 98.0%                                                                               |
| Wt. Per ml at 20°C                                                                                                                     | 0.899 - 0.903 gm                                                                    |
| Refractive Index (n) <sub>20</sub><br>D                                                                                                | 1.419 - 1.420                                                                       |
| Boiling Range                                                                                                                          | 167°- 171°C                                                                         |
| <b>Note(s) : Assay (if applicable) method mentioned.</b>                                                                               |                                                                                     |
| <b>Disposal:</b> Dissolve the chemical to be disposed, in water and allow it to run to waste, diluting with large quantities of water. |                                                                                     |
| Hazard Pictogram(s) :-                                                                                                                 |                                                                                     |
|                                                     |                                                                                     |
| GHS06                                                                                                                                  |                                                                                     |

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifiers**Product name : **MUTUAL SOLVENT**

CAS-No. : 111-76-2

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

Identified uses : Laboratory chemicals, Industrial &amp; for professional use only

**1.3 Details of the supplier of the safety data sheet**Company: **RED STON INTERNATIONALFOR  
PETRULEM SOLVENT**

Telephone : +965-67751003

Email : [RedstoneKuwait@gmail.com](mailto:RedstoneKuwait@gmail.com)**1.4 Emergency telephone number**

Emergency Phone # : +965-67751003

**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

Acute toxicity, Oral (Category 4), H302

Acute toxicity, Inhalation (Category 4), H332

Acute toxicity, Dermal (Category 4), H312

Skin irritation (Category 2), H315

Eye irritation (Category 2), H319

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

**2.2 Label elements****Labelling according Regulation (EC) No 1272/2008**

Pictogram



Signal word

Warning

Hazard statement(s)

H302 + H312 + H332

Harmful if swallowed, in contact with skin or if inhaled

|                                |                                                                                                                                          |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| H315                           | Causes skin irritation.                                                                                                                  |
| H319                           | Causes serious eye irritation.                                                                                                           |
| Precautionary statement(s)     |                                                                                                                                          |
| P261                           | Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.                                                                                   |
| P301 + P312 + P330             | IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.                                                 |
| P302 + P352 + P312             | IF ON SKIN: Wash with plenty of water. Call a POISON CENTER or doctor/ physician if you feel unwell.                                     |
| P304 + P340 + P312             | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. |
| P305 + P351 + P338             | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.         |
| P337 + P313                    | If eye irritation persists: Get medical advice/ attention.                                                                               |
| Supplemental Hazard Statements | none                                                                                                                                     |

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. Rapidly absorbed through skin.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

|                  |   |                                               |
|------------------|---|-----------------------------------------------|
| Synonyms         | : | 2-Butoxyethanol<br>Butyl glycol<br>EB Solvent |
| Formula          | : | C <sub>6</sub> H <sub>14</sub> O <sub>2</sub> |
| Molecular weight | : | 118,18 g/mol                                  |
| CAS-No.          | : | 111-76-2                                      |
| EC-No.           | : | 203-905-0                                     |
| Index-No.        | : | 603-014-00-0                                  |

#### Hazardous ingredients according to Regulation (EC) No 1272/2008

| Component              |              | Classification                   | Concentration |
|------------------------|--------------|----------------------------------|---------------|
| <b>2-Butoxyethanol</b> |              |                                  |               |
| CAS-No.                | 111-76-2     | Acute Tox. 4; Skin Irrit. 2; Eye | <= 100 %      |
| EC-No.                 | 203-905-0    | Irrit. 2; H302, H332, H312,      |               |
| Index-No.              | 603-014-00-0 | H315, H319                       |               |

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

## SECTION 4: First aid measures

### 4.1 Description of 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.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**

No data available

**SECTION 5: Fire fighting measures****5.1 Extinguishing media****Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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

Carbon oxides

**5.3 Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**

Use water spray to cool unopened containers.

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

**6.2 Environmental precautions**

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

**6.3 Methods and materials for containment and cleaning up**

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**

For disposal see section 13.

**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

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

For precautions see section 2.2.

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

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.  
Storage class (TRGS 510): Combustible liquids

## **7.3 Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

# **SECTION 8: Exposure controls/personal protection**

## **8.1 Control parameters**

**Components with workplace control parameters**

## **8.2 Exposure controls**

### **Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### **Personal protective equipment**

#### **Eye/face protection**

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### **Body Protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### **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).

#### **Control of environmental exposure**

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

# **SECTION 9: Physical and chemical properties**

## **9.1 Information on basic physical and chemical properties**

|                                                 |                                                                     |
|-------------------------------------------------|---------------------------------------------------------------------|
| a) Appearance Form                              | : liquid                                                            |
|                                                 | Colour: colourless                                                  |
| b) Odour                                        | No data available                                                   |
| c) Odour Threshold                              | No data available                                                   |
| d) pH                                           | No data available                                                   |
| e) Melting point/freezing point                 | Melting point/range: -75 °C - lit.                                  |
| f) Initial boiling point and boiling range      | 167 - 171 °C - lit.                                                 |
| g) Flash point                                  | 67 °C - closed cup                                                  |
| h) Evaporation rate                             | No data available                                                   |
| i) Flammability (solid, gas)                    | No data available                                                   |
| j) Upper/lower flammability or explosive limits | Upper explosion limit: 12,7 %(V)<br>Lower explosion limit: 1,1 %(V) |
| k) Vapour pressure                              | 13 hPa at 81 °C<br>< 1 hPa at 20 °C                                 |
| l) Vapour density                               | 4,08 - (Air = 1.0)                                                  |
| m) Relative density                             | 0.899-0.903 g/cm <sup>3</sup> at 20 °C                              |
| n) Water solubility                             | soluble                                                             |
| o) Partition coefficient: n-octanol/water       | log Pow: 0,81 at 25 °C                                              |
| p) Auto-ignition temperature                    | 230 °C at 1.013 hPa                                                 |
| q) Decomposition temperature                    | No data available                                                   |
| r) Viscosity                                    | 3,642 mm <sup>2</sup> /s at 20 °C -                                 |
| s) Explosive properties                         | No data available                                                   |
| t) Oxidizing properties                         | No data available                                                   |

## 9.2 Other safety information

|                         |                     |
|-------------------------|---------------------|
| Surface tension         | 65,03 mN/m at 20 °C |
| Relative vapour density | 4,08 - (Air = 1.0)  |

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

Heat, flames and sparks.

### 10.5 Incompatible materials

Strong oxidizing agents

### 10.6 Hazardous decomposition products

Other decomposition products - No data available  
In the event of fire: see section 5

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

LD50 Oral - Rat - male - 880 mg/kg  
(OECD Test Guideline 401)

LD50 Dermal - Rabbit - male - 1.060 mg/kg  
(OECD Test Guideline 402)

LD50 Intraperitoneal - Rat - 220 mg/kg

LD50 Intravenous - Rat - 307 mg/kg

#### Skin corrosion/irritation

Skin - Rabbit

Result: Skin irritation - 20 h

#### Serious eye damage/eye irritation

Eyes - Rabbit

Result: Eye irritation - 24 h  
(OECD Test Guideline 405)

#### Respiratory or skin sensitisation

Maximisation Test (GPMT) - Guinea pig

Result: Does not cause skin sensitisation.  
(OECD Test Guideline 406)

#### Germ cell mutagenicity

Hamster

ovary

Result: negative

OECD Test Guideline 474

Mouse - male

Result: negative

#### Carcinogenicity

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (2-Butoxyethanol)

#### Reproductive toxicity

Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

#### Specific target organ toxicity - single exposure

No data available

#### Specific target organ toxicity - repeated exposure

No data available

#### Aspiration hazard

No data available

#### Additional Information

Repeated dose toxicity Rat - male - Oral - NOAEL : < 69 mg/kg - OECD Test Guideline 408

RTECS: KJ8575000

Human exposure above 200 ppm can be expected to cause narcosis, damage to the kidney and liver and present an abnormal blood picture showing erythropenia, reticulocytosis, granulocytosis, leukocytosis, and would be likely to cause fragility of erythrocytes and hematuria. Swallowing of 2-butoxyethanol results in a sour taste that turns to a burning sensation and is followed by numbness of the tongue which indicates paralysis of the sensory nerve endings., Central nervous system depression, Headache, narcosis

## 12.1 Toxicity

## 12.2 Persistence and degradability

### 12.3 Bioaccumulative potential

## 12.4 Mobility in soil

## 12.5 Results of PBT and vPvB assessment

## 12.6 Other adverse effects

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

## Product

Cont am ina t e d pac ka qing

## SECTION 14: Transport information

### 14.1 UN number

## 14.2 UN proper shipping name

### 14.3 Transport hazard class(es)

#### 14.4 Packaging group

## 14.5 Environmental hazards

Page 8 of 8



#### **14.6 Special precautions for user**

No data available

### **SECTION 15: Regulatory information**

This safety datasheet complies with the requirements of Regulation (EC) No. 453/2010.

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

#### **15.2 Chemical Safety Assessment**

For this product a chemical safety assessment was not carried out

### **SECTION 16: Other information**

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

|                    |                                                          |
|--------------------|----------------------------------------------------------|
| H302               | Harmful if swallowed.                                    |
| H302 + H312 + H332 | Harmful if swallowed, in contact with skin or if inhaled |
| H312               | Harmful in contact with skin.                            |
| H315               | Causes skin irritation.                                  |
| H319               | Causes serious eye irritation.                           |
| H332               | Harmful if inhaled.                                      |