

# SAFETY DATA SHEET

Issuing date 06-Jun-2015

## Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### Product identifier

Product Code 002308  
Product name 002308

### Relevant identified uses of the substance or mixture and uses advised against

Recommended use Printing ink  
Uses advised against No information available

### Details of the supplier of the safety data sheet

#### Company

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#### Emergency telephone number

Markem-Imaje S.A.S.: (33) 4 75 75 55 00  
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## Section 2: HAZARDS IDENTIFICATION

### Classification of the substance or mixture REGULATION (EC) No 1272/2008

|  |                     |
|--|---------------------|
| Acute oral toxicity                              | Category 4 - (H302) |
| Serious eye damage/eye irritation                | Category 1 - (H318) |
| Specific target organ toxicity - single exposure | Category 3 - (H336) |
| Flammable liquids                                | Category 2 - (H225) |

Classification according to EU Directives 67/548/EEC or 1999/45/EC  
For the full text of the R-phrases mentioned in this Section, see Section 16

## Section 2: HAZARDS IDENTIFICATION

**Symbol(s)**

Xi - Irritant  
F - Highly flammable

**R-code(s)**

F;R11 - Xi;R41 - R67

**Label elements****Product identifier****Signal word**

Danger

**hazard statements**

H302 - Harmful if swallowed  
H318 - Causes serious eye damage  
H336 - May cause drowsiness or dizziness  
H225 - Highly flammable liquid and vapour

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Wear protective gloves/protective clothing/eye protection/face protection  
Avoid breathing dust/fume/gas/mist/vapours/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  
Keep cool

**Skin**

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

**EYES**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
Immediately call a POISON CENTRE or doctor/physician

**FIRE**

In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction

**Inhalation**

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
Call a POISON CENTRE or doctor/physician if you feel unwell

**INGESTION**

IF SWALLOWED: Call a POISON CENTRE or doctor/physician if you feel unwell  
Rinse mouth

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed  
Store locked up

**Other hazards**

May be harmful in contact with skin

### Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### Chemical nature of the preparation

Preparation.

| Chemical Name    | EC-No     | CAS-No  | Weight % | Classification           | GHS Classification   |
|------------------|-----------|---------|----------|--------------------------|--|
| n-Propyl alcohol | 200-746-9 | 71-23-8 | 90 - 100 | F; R11<br>Xi; R41<br>R67 | Eye Dam. 1 (H318)<br>STOT SE 3 (H336)<br>Flam. Liq. 2 (H225) |

For the full text of the R-phrases mentioned in this Section, see Section 16

### Section 4: FIRST AID MEASURES

#### Description of first aid measures

|                                   |   |
|-----------------------------------|---|
| <b>General advice</b>             | Call 211 or emergency medical service. Remove and isolate contaminated clothing and shoes.  |
| <b>Inhalation</b>                 | Move victim to fresh air. Apply artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult.   |
| <b>Skin contact</b>               | Wash skin with soap and water.  |
| <b>Eye contact</b>                | In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.   |
| <b>Ingestion</b>                  | Immediate medical attention is not required. Rinse mouth. Drink plenty of water. Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician. |
| <b>Protection of first-aiders</b> | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.  |

#### Most important symptoms and effects, both acute and delayed

**Most Important Symptoms/Effects** No information available

#### Indication of any immediate medical attention and special treatment needed

**Notes to physician** Keep victim warm and quiet. Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.

### Section 5: FIRE FIGHTING MEASURES

#### Extinguishing media

##### **Suitable extinguishing media**

Dry chemical, CO<sub>2</sub>, water spray or alcohol-resistant foam. Water spray, fog or alcohol-resistant foam.

##### **Extinguishing media which must not be used for safety reasons**

CAUTION: All these products have a very low flash point Do not use dry chemical extinguishers to control fires involving nitromethane or nitroethane Do not use straight streams

#### Special hazards arising from the substance or mixture

Vapors may form explosive mixtures with air Vapors may travel to source of ignition and flash back Most vapours are heavier than air Vapor explosion hazard indoors, outdoors or in sewers Those substances designated with a "P" may polymerize explosively when heated or involved in a fire Runoff to sewer may create fire or explosion hazard

#### Advice for fire-fighters

#### **Protective equipment and precautions for firefighters**

Move containers from fire area if you can do it without risk.

## Section 6: ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures

##### **Personal precautions**

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Stop leak if you can do it without risk.

Water spray may reduce vapor; but may not prevent ignition in closed spaces.

##### Environmental precautions

SEE PART A & PART B MSDS'S FOR HAZARD WARNING & OTHER INFORMATION. Beware of vapours accumulating to form explosive concentrations.

#### Methods and material for containment and cleaning up

##### **Methods for containment**

A vapor suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

##### **Methods for cleaning up**

Use clean non-sparking tools to collect absorbed material.

## Section 7: HANDLING AND STORAGE

#### Precautions for safe handling

##### **Handling**

Ensure adequate ventilation. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Use only in an area containing flame proof equipment. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment. Do not breathe vapours or spray mist. Avoid contact with skin, eyes and clothing.

##### **Hygiene measures**

When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing.

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

##### **Storage**

Keep tightly closed in a dry and cool place. Keep in properly labelled containers. Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat and sources of ignition. Keep away from heat. Protect from light.

## Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control parameters

| Chemical Name               | EU | The United Kingdom  | France                                     | Spain   | Germany |
|-----------------------------|----|---|--|---|---------|
| n-Propyl alcohol<br>71-23-8 |    | TWA: 200 ppm<br>TWA: 500 mg/m <sup>3</sup><br>STEL: 250 ppm<br>STEL: 625 mg/m <sup>3</sup><br>Sk* | TWA: 200 ppm<br>TWA: 500 mg/m <sup>3</sup> | TWA: 200 ppm<br>TWA: 500 mg/m <sup>3</sup><br>STEL: 400 ppm<br>STEL: 1000 mg/m <sup>3</sup><br>via dérmica* | -       |

| Chemical Name               | Italy | Portugal                      | The Netherlands | Finland  | Denmark  |
|-----------------------------|-------|-------------------------------|-----------------|--|--|
| n-Propyl alcohol<br>71-23-8 | -     | TWA: 200 ppm<br>STEL: 400 ppm | -               | TWA: 200 ppm<br>TWA: 500 mg/m <sup>3</sup><br>STEL: 250 ppm<br>STEL: 620 mg/m <sup>3</sup> | TWA: 200 ppm<br>TWA: 500 mg/m <sup>3</sup><br>H* |

| Chemical Name               | Austria                                    | Switzerland                                      | Poland  | Norway  | Ireland                              |
|-----------------------------|--|--|---|---|--------------------------------------|
| n-Propyl alcohol<br>71-23-8 | TWA: 200 ppm<br>TWA: 500 mg/m <sup>3</sup> | TWA: 200 ppm<br>TWA: 500 mg/m <sup>3</sup><br>H* | STEL: 600 mg/m <sup>3</sup><br>TWA: 200 mg/m <sup>3</sup> | TWA: 100 ppm<br>TWA: 245 mg/m <sup>3</sup><br>STEL: 150 ppm<br>STEL: 306.25 mg/m <sup>3</sup><br>H* | TWA: 100 ppm<br>STEL: 300 ppm<br>Sk* |

**Derived No Effect Level (DNEL)** No information available

**Predicted No Effect Concentration (PNEC)** No information available

#### Exposure controls

**Engineering measures** Ensure adequate ventilation. Use explosion-proof equipment.

#### **Personal protective equipment**

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

tightly fitting safety goggles. face-shield.

##### **Hand protection**

Wear protective gloves. impervious butyl rubber gloves.

##### **Skin and body protection**

antistatic boots. Wear fire/flame resistant/retardant clothing. impervious gloves. long sleeved clothing. Chemical resistant apron. apron.

##### **Respiratory protection**

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

**Environmental exposure controls** Do not allow material to contaminate ground water system.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

#### Information on basic physical and chemical properties

|                                   |                          |                                     |                          |
|-----------------------------------|--------------------------|-------------------------------------|--------------------------|
| <b>Physical state</b>             | liquid                   | <b>Colour</b>                       | red                      |
| <b>Odour</b>                      | Alcohol                  |                                     |                          |
| <b>Odour Threshold</b>            | No information available |                                     |                          |
| <b>Property</b>                   | <b>Values</b>            | <b>pH</b>                           | No information available |
| <b>Melting/freezing point</b>     | <-125°C / <-193°F        | <b>Boiling point/range</b>          | >95°C / >203°F           |
| <b>Flash point</b>                | >15°C / >59°F            |                                     |                          |
| <b>Flammability Limits in Air</b> |                          |                                     |                          |
| <b>lower flammability limit</b>   | 2.1                      | <b>Solubility in other solvents</b> | No information available |
| <b>upper flammability limit</b>   | 13.5                     | <b>Decomposition temperature</b>    | No information available |
| <b>Autoignition temperature</b>   | >350°C / >662°F          | <b>Dynamic viscosity</b>            | No information available |
| <b>Kinematic viscosity</b>        | No information available |                                     |                          |
| <b>Oxidizing properties</b>       | No information available |                                     |                          |

#### OTHER INFORMATION

|                                |                 |
|--------------------------------|-----------------|
| <b>Vapour pressure</b>         | 2.7 kPa (25 °C) |
| <b>Relative vapour density</b> | >1              |
| <b>Density</b>                 | 0.815 (20 °C)   |
| <b>Water solubility</b>        | partly soluble  |

**Section 9: PHYSICAL AND CHEMICAL PROPERTIES**Partition coefficient: n-octanol/water  $\log P(o/w) = 0.25$ **Section 10: STABILITY AND REACTIVITY****Reactivity**

no data available

**Chemical stability**

Stable.

**Explosion Data**

Sensitivity to Mechanical Impact none

Sensitivity to Static Discharge yes.

**Possibility of hazardous reactions****Hazardous polymerisation**

no.

**Hazardous reactions**

strong oxidizing agents.

**Conditions to avoid**

Heat, flames and sparks.

**Incompatible materials**

Incompatible with oxidizing agents. Incompatible with strong acids and bases.

**Hazardous decomposition products**

none.

**Section 11: TOXICOLOGICAL INFORMATION**

The following values are calculated based on chapter 3.1 of the GHS document

1,943.00mg/kg

4,207.00mg/kg

**Acute Toxicity*****Inhalation***

May cause irritation of respiratory tract. May be harmful by inhalation . May be harmful by inhalation . May cause irritation of respiratory tract. May be harmful if inhaled.

***Skin contact***

Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.

***Eye contact***

Irritating to eyes. May cause irreversible eye damage.

***Ingestion***

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. May be harmful if swallowed. Ingestion may cause irritation to mucous membranes. May be harmful if swallowed.

## Section 11: TOXICOLOGICAL INFORMATION

### Component Information

| Chemical Name    | LD50 Oral            | LD50 Dermal             | LC50 Inhalation         |
|------------------|----------------------|-------------------------|-------------------------|
| n-Propyl alcohol | = 1870 mg/kg ( Rat ) | = 4049 mg/kg ( Rabbit ) | > 13548 ppm ( Rat ) 4 h |

### Chronic toxicity

Inhalation of vapours in high concentration may cause irritation of respiratory system. Concentration above the admissible concentration at the workplace may cause dizziness, headache and inebriation. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Avoid repeated exposure.

### Other information

Avoid exposure to women during early pregnancy.

## Section 12: ECOLOGICAL INFORMATION

| Chemical Name    | CAS-No  | log Pow | Toxicity to Algae | Toxicity to microorganisms | German Water Class (VwVwS) Annex 2 |
|------------------|---------|---------|-------------------|----------------------------|------------------------------------|
| n-Propyl alcohol | 71-23-8 | 0.34    |                   |                            | 176                                |

| Chemical Name    | CAS-No  | Daphnia Magna (Water Flea)   | Toxicity to fish                                      |
|------------------|---------|--|---|
| n-Propyl alcohol | 71-23-8 | 3339 - 3977: 48 h Daphnia magna mg/L EC50 Static<br>3642: 48 h Daphnia magna mg/L EC50 | 4480: 96 h Pimephales promelas mg/L LC50 flow-through |

## Section 13: DISPOSAL CONSIDERATIONS

### Waste treatment methods

**Waste from Residues/Unused Products**      Dispose of in accordance with local regulations

## Section 14: TRANSPORT INFORMATION

### IMDG/IMO

|                            |              |
|----------------------------|--------------|
| 14.1. UN-No                | UN1210       |
| 14.2. Proper shipping name | Printing ink |
| 14.3. Hazard Class         | 3            |
| 14.4. Packing group        | II           |
| 14.5. Marine pollutant     | none.        |
| EmS                        | F-E, S-D     |

### ADR

|                      |              |
|----------------------|--------------|
| 14.1. UN-No          | UN1210       |
| 14.2.                |              |
| Proper shipping name | Printing ink |
| 14.3. Hazard Class   | 3            |
| 14.4. Packing group  | II           |
| Classification Code  | F1           |

**Section 14: TRANSPORT INFORMATION****IATA**

|                                   |              |
|-----------------------------------|--------------|
| <b>14.1. UN-No</b>                | UN1210       |
| <b>14.2. Proper shipping name</b> | Printing ink |
| <b>14.3. Hazard Class</b>         | 3            |
| <b>14.4. Packing group</b>        | II           |

**Section 15: REGULATORY INFORMATION****Safety, health and environmental regulations/legislation specific for the substance or mixture**

In accordance with Regulation (EC) No. 1272/2008

**International Inventories**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

**Chemical Safety Assessment****Section 16: OTHER INFORMATION****Key or legend to abbreviations and acronyms****Full text of R-phrases referred to under sections 2 and 3**

R11 - Highly flammable  
R41 - Risk of serious damage to eyes  
R67 - Vapours may cause drowsiness and dizziness

**Issuing date** 06-Jun-2015

**Reason for revision** All

**This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006**

**End of Safety Data Sheet**