

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Product name : ClearVision Smart Glass  
Product code : G1

#### 1.2. Recommended use and restrictions on use

Use of the substance/mixture : Automotive Coating

#### 1.3. Supplier

|   |   |
|---|---|
| GTECHNIQ LTD  | GTECHNIQ NORTH AMERICA  |
| Bridge Business Park  | 4780 Hammond Industrial Drive   |
| Upper Heyford   | Suite 100   |
| Northampton, NN7 3FA - United Kingdom   | Cumming GA 30041  |
| T +44 (0)1604 962 553   | T (855) 483-2401  |
| <a href="mailto:uk@gtechniq.com">uk@gtechniq.com</a> - <a href="http://www.gtechniq.com">www.gtechniq.com</a> | <a href="mailto:infona@gtechniq.com">infona@gtechniq.com</a> - <a href="http://www.gtechniq.com">www.gtechniq.com</a> |

#### 1.4. Emergency telephone number

Emergency number : +44 (0)1933 445 260  
For Chemical Emergency Call 24hr / day, 7 days / week.

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS US classification

|   |  |
|---|--|
| Flammable liquids Category 2                                | H225 Highly flammable liquid and vapor |
| Serious eye damage/eye irritation Category 2                | H319 Causes serious eye irritation     |
| Specific target organ toxicity (single exposure) Category 3 | H336 May cause drowsiness or dizziness |

Full text of H statements : see section 16

#### 2.2. GHS Label elements, including precautionary statements

##### GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

H225 - Highly flammable liquid and vapor  
H319 - Causes serious eye irritation  
H336 - May cause drowsiness or dizziness

Precautionary statements (GHS US) :

P102 - Keep out of reach of children.  
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P261 - Avoid breathing fume, mist, spray, vapors.  
P280 - Wear eye protection, protective clothing, protective gloves.  
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P312 - Call a POISON CENTER, a doctor if you feel unwell.  
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

#### 2.3. Other hazards which do not result in classification

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

# ClearVision Smart Glass

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

| Name        | Product identifier | %    | GHS US classification                                       |
|-------------|--------------------|------|---|
| PROPAN-2-OL | (CAS-No.) 67-63-0  | ≥ 40 | Flam. Liq. 2, H225<br>Eye Irrit. 2, H319<br>STOT SE 3, H336 |

Full text of hazard classes and H-statements : see section 16

### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

|                                       |  |
|---------------------------------------|--|
| First-aid measures general            | : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).  |
| First-aid measures after inhalation   | : Remove person to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.  |
| First-aid measures after skin contact | : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing.   |
| First-aid measures after eye contact  | : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention. If eye irritation persists: Get medical advice/attention. |
| First-aid measures after ingestion    | : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.   |

#### 4.2. Most important symptoms and effects (acute and delayed)

|                                     |  |
|-------------------------------------|--|
| Symptoms/effects                    | : May cause drowsiness or dizziness.                                   |
| Symptoms/effects after inhalation   | : May cause drowsiness or dizziness. May cause respiratory irritation. |
| Symptoms/effects after skin contact | : May cause irritation to skin.  |
| Symptoms/effects after eye contact  | : Causes serious eye irritation.                                       |
| Symptoms/effects after ingestion    | : May cause irritation to the digestive tract.                         |

#### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically. Call a doctor.

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable (and unsuitable) extinguishing media

|                                |  |
|--------------------------------|--|
| Suitable extinguishing media   | : Water spray. Sand. dry chemical powder, alcohol-resistant foam, carbon dioxide (CO <sub>2</sub> ). |
| Unsuitable extinguishing media | : Do not use a heavy water stream.   |

#### 5.2. Specific hazards arising from the chemical

|  |   |
|--|---|
| Fire hazard                                      | : Highly flammable liquid and vapor. vapors may travel long distances along ground before igniting/flashing back to vapor source. |
| Explosion hazard                                 | : May form flammable/explosive vapor-air mixture.   |
| Reactivity in case of fire                       | : Not known.  |
| Hazardous decomposition products in case of fire | : Toxic fumes may be released.  |

#### 5.3. Special protective equipment and precautions for fire-fighters

|                                |   |
|--------------------------------|---|
| Precautionary measures fire    | : Exercise caution when fighting any chemical fire.   |
| Firefighting instructions      | : Use water spray or fog for cooling exposed containers. Prevent fire-fighting water from entering environment. |
| Protection during firefighting | : Do not enter fire area without proper protective equipment, including respiratory protection.                 |

### SECTION 6: Accidental release measures

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

|                  |  |
|------------------|--|
| General measures | : Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking. Avoid contact with skin and eyes. Ensure adequate ventilation. |
|------------------|--|

##### 6.1.1. For non-emergency personnel

|                      |   |
|----------------------|---|
| Protective equipment | : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". |
| Emergency procedures | : Evacuate unnecessary personnel. Ventilate area.   |

# ClearVision Smart Glass

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection. Avoid breathing fume, mist, spray, vapors.  
Emergency procedures : Ventilate area. Evacuate unnecessary personnel.

### 6.2. Environmental precautions

Avoid release to the environment. Notify authorities if liquid enters sewers or public waters.

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

- For containment : Absorb spillage.  
Methods for cleaning up : Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Place in a suitable container for disposal in accordance with the waste regulations (see Section 13). Store away from other materials.  
Other information : This material and its container must be disposed of as hazardous waste.

### 6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For disposal of solid materials or residues refer to section 13 : "Disposal considerations".

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Additional hazards when processed : Handle empty containers with care because residual vapors are flammable.  
Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No open flames. No smoking. Use only non-sparking tools. Avoid breathing fume, mist, spray, vapors. Use only outdoors or in a well-ventilated area. Wear suitable protective clothing, gloves and eye or face protection.  
Hygiene measures : Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.

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

- Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical equipment.  
Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Sources of ignition. Keep in fireproof place. Keep container tightly closed.  
Incompatible products : Strong acids. Strong bases. Strong oxidizing agents.  
Incompatible materials : Sources of ignition. Heat sources. Direct sunlight.  
Storage temperature : 15 – 30 °C  
Storage area : Store in a well-ventilated place.  
Packaging materials : Keep only in original container.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

| ClearVision Smart Glass                    |  |
|--|--|
| No additional information available        |  |
| PROPAN-2-OL (67-63-0)                      |  |
| USA - ACGIH - Occupational Exposure Limits |  |
| Local name                                 | 2-Propanol   |
| ACGIH TWA (ppm)                            | 200 ppm  |
| ACGIH STEL (ppm)                           | 400 ppm  |
| Remark (ACGIH)                             | Eye & URT irr; CNS impair  |
| Regulatory reference                       | ACGIH 2020   |
| USA - ACGIH - Biological Exposure Indices  |  |
| Local name                                 | 2-PROPANOL   |
| Biological Exposure Indices (BEI)          | 40 mg/l Parameter: Acetone - Medium: urine - Sampling time: End of shift at end of workweek - Notations: B, Ns |
| Regulatory reference                       | ACGIH 2020   |
| USA - OSHA - Occupational Exposure Limits  |  |
| Local name                                 | Isopropyl alcohol  |
| OSHA PEL (TWA) (mg/m³)                     | 980 mg/m³  |

# ClearVision Smart Glass

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

|                                |                          |
|--------------------------------|--------------------------|
| OSHA PEL (TWA) (ppm)           | 400 ppm                  |
| Regulatory reference (US-OSHA) | OSHA Annotated Table Z-1 |

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure adequate ventilation. Use spark-/explosionproof appliances and lighting system.

### 8.3. Individual protection measures/Personal protective equipment

#### Personal protective equipment:

Avoid all unnecessary exposure. PPE compliant to the recommended EN/ISO or equivalent standards should be selected.

#### Hand protection:

Wear protective gloves.

#### Eye protection:

Chemical goggles or safety glasses

#### Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

Wear respiratory protection. Where exposure through inhalation may occur from handling or use, respiratory protection equipment is required. Exposure limits for airborne contaminants must not be exceeded.

#### Other information:

Do not eat, drink or smoke during use.

## SECTION 9: Physical and chemical properties

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

|   |   |
|---|---|
| Physical state                                  | : Liquid  |
| Color   | : Colorless   |
| Odor  | : alcoholic   |
| Odor threshold                                  | : No data available   |
| pH  | : 2.5   |
| Melting point                                   | : No data available   |
| Freezing point                                  | : No data available   |
| Boiling point                                   | : 82 °C   |
| Flash point                                     | : 12 °C   |
| Relative evaporation rate (butyl acetate=1)     | : No data available   |
| Flammability (solid, gas)                       | : Highly flammable liquid and vapor.                                  |
| Vapor pressure                                  | : 46.51 mbar  |
| Relative vapor density at 20 °C                 | : No data available   |
| Relative density                                | : No data available   |
| Specific gravity / density                      | : 0.79 g/cm <sup>3</sup>  |
| Solubility                                      | : insoluble in water.   |
| Partition coefficient n-octanol/water (Log Pow) | : No data available   |
| Auto-ignition temperature                       | : 425 °C  |
| Decomposition temperature                       | : No data available   |
| Viscosity, kinematic                            | : 3.519 mm <sup>2</sup> /s  |
| Viscosity, dynamic                              | : 2.78 mPa·s  |
| Explosion limits                                | : Lower explosive limit (LEL): 0.8<br>Upper explosive limit (UEL): 12 |
| Explosive properties                            | : No data available   |
| Oxidizing properties                            | : No data available   |

# ClearVision Smart Glass

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Stable at ambient temperature and under normal conditions of use.

### 10.2. Chemical stability

Highly flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

### 10.3. Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. No flames, no sparks. Eliminate all sources of ignition.

### 10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizing agents.

### 10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. May release flammable gases.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

|                                   |   |
|-----------------------------------|---|
| Acute toxicity (oral)             | : Not classified                            |
| Acute toxicity (dermal)           | : Not classified                            |
| Acute toxicity (inhalation)       | : Not classified                            |
| Skin corrosion/irritation         | : Not classified<br>pH: 2.5                 |
| Serious eye damage/irritation     | : Causes serious eye irritation.<br>pH: 2.5 |
| Respiratory or skin sensitization | : Not classified                            |
| Germ cell mutagenicity            | : Not classified                            |
| Carcinogenicity                   | : Not classified                            |
| Reproductive toxicity             | : Not classified                            |
| STOT-single exposure              | : May cause drowsiness or dizziness.        |

#### PROPAN-2-OL (67-63-0)

|                                     |  |
|-------------------------------------|--|
| STOT-single exposure                | May cause drowsiness or dizziness.                                     |
| STOT-repeated exposure              | : Not classified   |
| Aspiration hazard                   | : Not classified   |
| Viscosity, kinematic                | : 3.519 mm²/s  |
| Symptoms/effects                    | : May cause drowsiness or dizziness.                                   |
| Symptoms/effects after inhalation   | : May cause drowsiness or dizziness. May cause respiratory irritation. |
| Symptoms/effects after skin contact | : May cause irritation to skin.  |
| Symptoms/effects after eye contact  | : Causes serious eye irritation.                                       |
| Symptoms/effects after ingestion    | : May cause irritation to the digestive tract.                         |

## SECTION 12: Ecological information

### 12.1. Toxicity

#### PROPAN-2-OL (67-63-0)

|                                |           |
|--------------------------------|-----------|
| LC50 fish 1                    | 9640 mg/l |
| LC50 other aquatic organisms 1 | 7550 mg/l |

# ClearVision Smart Glass

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 12.2. Persistence and degradability

#### ClearVision Smart Glass

|                               |                  |
|-------------------------------|------------------|
| Persistence and degradability | Not established. |
|-------------------------------|------------------|

### 12.3. Bioaccumulative potential

#### ClearVision Smart Glass

|                           |                  |
|---------------------------|------------------|
| Bioaccumulative potential | Not established. |
|---------------------------|------------------|

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

Other information : Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

|  |   |
|--|---|
| Regional legislation (waste)               | : Disposal must be done according to official regulations.  |
| Waste treatment methods                    | : Dispose of contents/container in accordance with licensed collector's sorting instructions.   |
| Product/Packaging disposal recommendations | : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. |
| Additional information                     | : Handle empty containers with care because residual vapors are flammable.  |
| Ecology - waste materials                  | : Avoid release to the environment.   |

## SECTION 14: Transport information

### Department of Transportation (DOT)

In accordance with DOT

|                                |   |
|--------------------------------|---|
| Transport document description | : UN1219 Isopropanol (SOLUTION), 3, II                          |
| UN-No.(DOT)                    | : UN1219  |
| Proper Shipping Name (DOT)     | : Isopropanol<br>SOLUTION                                       |
| Class (DOT)                    | : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120 |
| Packing group (DOT)            | : II - Medium Danger  |
| Hazard labels (DOT)            | : 3 - Flammable liquid  |



|  |  |
|--|--|
| DOT Packaging Non Bulk (49 CFR 173.xxx)                          | : 202  |
| DOT Packaging Bulk (49 CFR 173.xxx)                              | : 242  |
| DOT Special Provisions (49 CFR 172.102)                          | : IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.<br>T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3)<br>TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. |
| DOT Packaging Exceptions (49 CFR 173.xxx)                        | : 4b, 150  |
| DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) | : 5 L  |
| DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)     | : 60 L   |

# ClearVision Smart Glass

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

|                                       |   |
|---------------------------------------|---|
| DOT Vessel Stowage Location           | : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded. |
| Emergency Response Guide (ERG) Number | : 129   |
| Other information                     | : No supplementary information available.   |

### Transportation of Dangerous Goods

|   |  |
|---|--|
| Transport document description  | : UN1219 ISOPROPANOL (SOLUTION), 3, II |
| UN-No. (TDG)  | : UN1219                               |
| Proper Shipping Name (Transportation of Dangerous Goods)                    | : ISOPROPANOL                          |
| TDG Primary Hazard Classes  | : 3 - Class 3 - Flammable Liquids      |
| Packing group   | : II - Medium Danger                   |
| Explosive Limit and Limited Quantity Index                                  | : 1 L                                  |
| Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index | : 5 L                                  |

### Transport by sea

|                                       |   |
|---------------------------------------|---|
| Transport document description (IMDG) | : UN 1219 ISOPROPANOL (ISOPROPYL ALCOHOL) (SOLUTION), 3, II (12°C c.c.) |
| UN-No. (IMDG)                         | : 1219  |
| Proper Shipping Name (IMDG)           | : ISOPROPANOL (ISOPROPYL ALCOHOL)                                       |
| Class (IMDG)                          | : 3 - Flammable liquids   |
| Packing group (IMDG)                  | : II - substances presenting medium danger                              |
| Limited quantities (IMDG)             | : 1 L   |

### Air transport

|                                       |   |
|---------------------------------------|---|
| Transport document description (IATA) | : UN 1219 Isopropanol (SOLUTION), 3, II |
| UN-No. (IATA)                         | : 1219                                  |
| Proper Shipping Name (IATA)           | : Isopropanol                           |
| Class (IATA)                          | : 3 - Flammable Liquids                 |
| Packing group (IATA)                  | : II - Medium Danger                    |

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

No additional information available

### 15.2. International regulations

#### CANADA

No additional information available

#### EU-Regulations

No additional information available

#### National regulations

No additional information available

### 15.3. US State regulations

No additional information available

## SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

|                   |  |
|-------------------|--|
| Data sources      | : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. |
| Other information | : None.  |

# ClearVision Smart Glass

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Full text of H-phrases:

|      |                                   |
|------|-----------------------------------|
| H225 | Highly flammable liquid and vapor |
| H319 | Causes serious eye irritation     |
| H336 | May cause drowsiness or dizziness |

SDS US (GHS HazCom 2012)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*