# Material Safety Date Sheet

## 1. Chemical Product / Company Identification

Product Name: **Nano470 Glass2Glass LOW VISCOSITY**
Product Type: Low Viscosity Adhesive for decorative glass bonding. Cures at 470nm.

## 2. Composition and Information on Harmful Ingredients

| Ingredients | % by weight | Hazard Symbol | R Phrases |
|---|---|---|---|
| Alphatic urethane acrylate | <75 | Irritant | 36 |
| Hydroxy alkyl Methacrylate | <40 | Irritant | 36/38, 43 |
| Methacrylic Acid | >1 | Irritant | 36 |

## 3. Hazards Identification

Label Precautionary Statements: IRRITANT Symbol: St Andrews cross
Irritating to eyes and skin

Symptoms of exposure: May cause sensitisation to skin contact

## 4. First Aid measures

Ingestion: Rinse mouth with water. Do not induce vomiting. If conscious give water to drink. Seek medical advice. Do not give anything by mouth to an unconscious person.

Inhalation: Remove to fresh air, keep warm and at rest. Administer artificial respiration as necessary.

Skin contact: Immediately wash with soap and water. Wash contaminated clothing. Obtain medical attention if soreness or redness persists.

Eye contact: Rinse immediately with plenty of water and seek medical advice.

## 5. Fire Fighting Measures

Extinguishing Media: Water spray, dry chemical, Carbon Dioxide, foam.
Combustion products CO, Carbon Dioxide, and traces of nitrogen oxides.
Special protective equipment
For fire fighting For large fires the local fire brigade must be called.
Self contained breathing apparatus and protective clothing
Must be worn. Cool containers with water spray.

## 6. Accidental release measures

Personal Protection: Contact with skin and eyes and inhalation to be avoided. Wear suitable protective Equipment, In enclosed or poorly ventilated areas wear self contained breathing apparatus during clean up.

Environmental Precautions: Do not allow entry into sewers or natural environments.

Workplace precautions: Ensure adequate ventilation. Eye wash and safety shower.

Methods for cleaning up: Evacuation area/limit access. Extinguish all ignition sources. Maximise ventilation. Absorb spill in an inert material e.g. Vermiculite/ sand/dry earth. Material will harden in sunlight. Mechanically remove to closed, labelled containers for disposal. Wash spill site thoroughly with soap and water.
Dispose in accordance with pertinent national legislation.

## 7. Handling and storage

Handling Precautions: Wear suitable protective clothing. Avoid eye and skin contact. Avoid inhalation of processing vapours. Ensure adequate ventilation. High standards of industrial hygiene are necessary.
Storage (including any special requirements) Store upright in original, closed containers in a cool, dry well ventilated place at between 5°C and 20°C. Protect from jeat and sunlight. Keep closed when not in use. Refrigeration can prolong shelf life. Avoid proximity of flames, heat sources and oxidising agents.

## 8. Exposure Control and Personal Protection

Ventilation: Effective mechanical ventilation necessary, especially in confined spaces. Local Exhaust ventilation recommended.

Respiratory Protection: In areas of concentration/confined spaces and in emergencies, self contained breathing Apparatus should be used.

Eye protection: Safety glasses or goggles are recommended.

Hand protection: P.V.C./chemical resistant gloves.

Skin protection: Recommended when large quantities are involved or where splashing may occur.

## 9. Physical and Chemical Properties

| | |
|---|---|
| Form: | Clear |
| Colour: | Clear, colourless |
| Odour: | Faint/Sweet |
| Melting point: | N/D |
| Boiling point: | N/D |
| Flash point: | >100°C |
| Flammability: | Low |
| Solid Content: | Approx. 100% |
| Autoflammability: | Low |
| Explosive limits | UEL :N/D LEL : N/D |

Oxidising properties:
Vapour pressure
(of principle component and name): @ 20°C <1mmHg
Hydroxy methacrylate

Relative density: 1,0783 (g/cm³)

Solubility in water: Negligible

Viscosity:
Brookfield at 25°C (spindle 4) @ 20RPM = 530, @50RPM = 532

## 10. Reactivity and Stability

Conditions to avoid: High temperatures. Radiation/sunlight. Contamination.

Materials to avoid: Polymerisation catalysts such as free radicals and their precursors, peroxides, Radiation's strong bases, oxidants and strong acids.
Hazardous decomposition products: CO, Carbon Dioxide and traces of oxides of nitrogen.
Hazardous polymerisation:
May occur as above. Conditions to avoid: Prolonged heating, sunlight, Catalysts as above. Will not occur.

## 11. Toxicological Information

Effect of eye contact: Causes moderate irritation and may cause permanent damage.
Effect of skin contact: May cause sensation on prolonged or repeated contact. May be absorbed through the skin if contact is prolonged.

Effect of inhalation: Exposure of high concentrations of vapour (and processing vapours) may cause irritation to the eyes, nose throat and upper respiratory tract.
Effect of ingestion: moderate irritation of the mouth, throat and digestive tract. Significant ingestion may give rise to symptoms which include muscle inco-ordination and visual impairment.
In all cases – Symptomatic support/treatment.

**12. Ecological Information**

No information available at the present time.

**13. Disposal Considerations**

In accordance with local authority regulations.
Controlled incineration by an approved contractor.
Do not allow entry into sewers or natural environments.

**14. Transport Information**

Not considered hazardous for the purposes of transportation.

**15. Regulatory Information**

European information:

IRRITANT Symbol: St Andrews cross
Irritating to eyes and skin

Symptoms of exposure: May cause sensitisation to skin contact

Risk Phrases: 36/38, 43

Safety Phrases: 26,28,36/37/39. In case of contact with eyes, rinse immediately with plenty of Water and seek medical advice.
After contact with skin, wash immediately with plenty of water. Wear suitable Protective clothing, gloves and eye/face protection.

Protect from heat and light. Ensure adequate ventilation during use.

**Other Information**

Polymerisation is exothermic. Uncontrolled polymerisation can cause containers to explode.

**Date of preparation March 2002**

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