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

<table>
<thead>
<tr>
<th>PRODUCT NAME</th>
<th>BONDMASTER QUICKBOND 5002A</th>
</tr>
</thead>
<tbody>
<tr>
<td>RECOMMENDED USE</td>
<td>Adhesive</td>
</tr>
<tr>
<td>SUPPLIER</td>
<td>Bondmaster Division of National Starch &amp; Chemical Woodside Road Eastleigh Hampshire SO50 4EX United Kingdom</td>
</tr>
<tr>
<td>EMERGENCY TELEPHONE</td>
<td>+44 (0)23 80 629628 (business hours)</td>
</tr>
</tbody>
</table>

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>EC NUMBER</th>
<th>CONCENTRATION %</th>
<th>EC SYMBOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl methacrylate</td>
<td>201-297-1</td>
<td>&gt;50</td>
<td>R43 R37/38 R11 XI F</td>
</tr>
<tr>
<td>2-Hydroxyethyl methacrylate</td>
<td>212-782-2</td>
<td>5 - 10</td>
<td>R43 R36/38 XI</td>
</tr>
<tr>
<td>Cumene hydroperoxide</td>
<td>201-254-7</td>
<td>1 - 5</td>
<td>R51/53 R37 R34 R23 R48/20/22 R21/22 R7 N XI C T XN O</td>
</tr>
<tr>
<td>Glycidyl methacrylate</td>
<td>203-441-9</td>
<td>1 - 5</td>
<td>R43 R36/38 R20/21/22 XI XN</td>
</tr>
</tbody>
</table>

For full text of risk phrases, please refer to Section 16.

### 3. HAZARDS IDENTIFICATION
**EMERGENCY OVERVIEW**

- **SENSITIZER**
- **IRRITANT**
- **HIGHLY FLAMMABLE**
- **DANGEROUS FOR THE ENVIRONMENT**

**EYE**
Severe/very severe irritant.

**SKIN CONTACT**
Irritating to the skin. Repeated and/or prolonged contact may cause skin sensitisation.

**INHALATION**
Vapour may be irritant to the respiratory tract.

**INGESTION**
No hazard in normal industrial use.

**PHYSICO-CHEMICAL**
May readily catch fire after brief contact with source of ignition.

**ENVIRONMENTAL**
Harmful to aquatic organisms. Not readily biodegradable.

### 4. FIRST-AID MEASURES

**EYE**
Obtain immediate medical attention. Immediately irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 10 minutes.

**SKIN CONTACT**
Immediate medical attention is not required. Flush exposed areas thoroughly with soap and water until all chemical is removed. Remove contaminated clothing and launder before reuse. If symptoms develop, obtain medical attention.

**INHALATION**
Immediate medical attention is not required. Remove patient from exposure. If symptoms develop, obtain medical attention.

**INGESTION**
Immediate medical attention is not required. Treat symptomatically and supportively.

### 5. FIRE-FIGHTING MEASURES

- **EXTINGUISHING MEDIA**
  - CO2; Dry Chemical; Foam; Water Fog

- **SPECIAL FIREFIGHTING PROCEDURES**
  - Fire fighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes.

- **FIRE & EXPLOSION HAZARDS**
  - Combustion may release noxious or toxic vapours. See below.

- **HAZARDOUS COMBUSTION PRODUCTS**
  - Carbon monoxide, carbon dioxide, unknown hydrocarbons.

- **LOWER EXPLOSION LIMIT (%)**
  - Not applicable

- **UPPER EXPLOSION LIMIT (%)**
  - Not applicable

- **AUTOFLAMMABILITY**
  - Not available

- **FLASH POINT**
  - 11.5 C (Setaflash Closed Tester)
6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK PROCEDURES Adsorb spillages onto sand, earth or any suitable adsorbent material. Scrape up and place in suitably labelled container for disposal.

For safety and environmental precautions, please review entire Safety Data Sheet for necessary information.

7. HANDLING AND STORAGE

STORAGE TEMPERATURE Ambient.
HANDLING/STORAGE Store in cool, dry place. Keep away from heat and sources of ignition.
SENSITIVE TO STATIC Yes
ELECTRICITY
SENSITIVITY TO MECHANICAL IMPACT No

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

COMPONENT EXPOSURE LIMITS
Methyl methacrylate 50 ppm TWA; 208 mg/m3 TWA
100 ppm STEL; 416 mg/m3 STEL

OCCUPATIONAL EXPOSURE CONTROLS

VENTILATION Local.
EYE PROTECTION REQUIREMENTS Safety glasses, goggles or face shield to protect against splashing. Personal eye protection should conform to EN 166.
GLOVE REQUIREMENTS Employee must wear appropriate protective gloves to prevent contact with this substance. Nitrile rubber or Viton™ gloves are recommended. Cotton or other absorbent gloves should not be worn. Gloves should conform to EN 374.
CLOTHING REQUIREMENTS Employee must wear appropriate protective clothing and equipment to prevent any possibility of skin contact with this substance.
WASH REQUIREMENTS Wash before eating, drinking, or using toilet facilities.
RESPIRATORY REQUIREMENTS None required under normal handling conditions.
9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PURE SUBSTANCE OR PREPARATION</td>
<td>Preparation.</td>
</tr>
<tr>
<td>PHYSICAL FORM</td>
<td>Liquid</td>
</tr>
<tr>
<td>COLOUR</td>
<td>green</td>
</tr>
<tr>
<td>ODOR</td>
<td>Acrylic odour.</td>
</tr>
<tr>
<td>ODOR THRESHOLD</td>
<td>Not available</td>
</tr>
<tr>
<td>pH AS IS</td>
<td>Not applicable</td>
</tr>
<tr>
<td>OXIDIZING PROPERTIES</td>
<td>Not applicable</td>
</tr>
<tr>
<td>BOILING POINT</td>
<td>Not applicable</td>
</tr>
<tr>
<td>MELTING/FREEZING POINT</td>
<td>Not applicable</td>
</tr>
<tr>
<td>SOLUBILITY IN WATER</td>
<td>Insoluble</td>
</tr>
<tr>
<td>PARTITION COEFFICIENT (n-octanol/water)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>VISCOSITY</td>
<td>Approximately 3000 mPa.s</td>
</tr>
<tr>
<td>RELATIVE DENSITY</td>
<td>1.01</td>
</tr>
<tr>
<td>BULK DENSITY</td>
<td>Not available</td>
</tr>
<tr>
<td>EVAPORATION RATE</td>
<td>Not applicable</td>
</tr>
<tr>
<td>VAPOUR PRESSURE (mmHg)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>VAPOUR DENSITY (air=1)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>VOLATILES</td>
<td>None</td>
</tr>
<tr>
<td>VOLATILE ORGANIC COMPOUNDS</td>
<td>Not available</td>
</tr>
<tr>
<td>AUTOFLAMMABILITY</td>
<td>Not available</td>
</tr>
<tr>
<td>FLASH POINT</td>
<td>11.5 C (Setaflash Closed Tester)</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Stability</th>
<th>Stable</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATERIALS TO AVOID</td>
<td>Acids., Oxidizers., Bases.</td>
</tr>
<tr>
<td>HAZARDOUS</td>
<td>Carbon monoxide, carbon dioxide, unknown hydrocarbons.</td>
</tr>
<tr>
<td>DECOMPOSITION PRODUCTS</td>
<td></td>
</tr>
</tbody>
</table>

11. TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EYE</td>
<td>Severe/very severe irritant.</td>
</tr>
<tr>
<td>SKIN</td>
<td>Irritating to the skin. Repeated and/or prolonged contact may cause skin sensitisation.</td>
</tr>
<tr>
<td>INHALATION</td>
<td>Vapour may be irritant to the respiratory tract.</td>
</tr>
<tr>
<td>INGESTION</td>
<td>No hazard in normal industrial use.</td>
</tr>
<tr>
<td>EFFECTS OF CHRONIC EXPOSURE</td>
<td>The toxicological properties of this product have not been fully evaluated.</td>
</tr>
<tr>
<td>TARGET ORGANS</td>
<td>Skin</td>
</tr>
<tr>
<td>SKIN SENSITIZATION</td>
<td>Sensitizer.</td>
</tr>
</tbody>
</table>

PAGE 4 OF 7
12. ECOLOGICAL INFORMATION

POTENTIAL EFFECT ON ENVIRONMENT
Harmful to aquatic organisms. Not readily biodegradable.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHODS
Waste disposal should be in accordance with existing Community, National and local regulations.

EMPTY CONTAINER WARNINGS
Empty containers may contain product residue; follow SDS and label warnings even after they have been emptied.

14. TRANSPORT INFORMATION (See also section 9)

IATA CLASSIFICATION
PROPER SHIPPING NAME ADHESIVES
TECHNICAL NAME Contains methyl methacrylate
HAZARD CLASS 3
U.N. NUMBER UN1133
PACKAGING GROUP III

IMDG CLASSIFICATION
PROPER SHIPPING NAME ADHESIVES
TECHNICAL NAME Contains methyl methacrylate
HAZARD CLASS 3
U.N. NUMBER UN1133
PACKAGING GROUP III

ADR/RID
PROPER SHIPPING NAME ADHESIVES
TECHNICAL NAME Contains methyl methacrylate
HAZARD CLASS 3
U.N. NUMBER UN1133
PACKAGING GROUP III
## 15. REGULATORY INFORMATION

<table>
<thead>
<tr>
<th>EC INDICATION OF DANGER</th>
<th>IRRITANT</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC SYMBOL</td>
<td>HIGHLY FLAMMABLE</td>
</tr>
</tbody>
</table>

### RISK PHRASES
- R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R37/38 - Irritating to respiratory system and skin.
- R43 - May cause sensitisation by skin contact.
- R41 - Risk of serious damage to eyes.
- R11 - Highly flammable.

### SAFETY PHRASES
- S24 - Avoid contact with skin.
- S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S16 - Keep away from sources of ignition - No smoking.
- S9 - Keep container in a well ventilated place.
- S33 - Take precautionary measures against static discharges.
- S37/39 - Wear suitable gloves and eye/face protection.

### CONTAINS
- Methyl methacrylate
- 2-Hydroxyethyl methacrylate
- Glycidyl methacrylate

### EINECS
All components of this product are listed in EINECS or ELINCS, or are otherwise exempt from EU notification requirements.
16. OTHER INFORMATION

REVISION 26/08/2004
REPLACES VERSION DATED 01/03/2001
ORIGINAL DOCUMENT DATED 08/01/1996
CHANGES SINCE PREVIOUS ISSUE
Entire Safety Data Sheet.
FOR REGULATORY INFORMATION, CONTACT:
Product Regulatory Group
National Starch & Chemical
Windsor Court
Kingsmead Business Park
London Road
High Wycombe
Bucks
HP11 1JU
United Kingdom
Telephone: +44 (0)1494 467500
Fax: +44 (0)1494 467560
E-mail: regulatoryeurope@nstarch.com

FULL TEXT OF RISK PHRASES FOR INGREDIENTS INDICATED IN SECTION 2:

Methyl methacrylate
R43 - May cause sensitisation by skin contact.
R37/38 - Irritating to respiratory system and skin.
R11 - Highly flammable.

2-Hydroxyethyl methacrylate
R43 - May cause sensitisation by skin contact.
R36/38 - Irritating to eyes and skin.

Cumene hydroperoxide
R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R37 - Irritating to respiratory system.
R34 - Causes burns.
R23 - Toxic by inhalation.
R48/20/22 - Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.
R21/22 - Harmful in contact with skin and if swallowed.
R7 - May cause fire.

Glycidyl methacrylate
R43 - May cause sensitisation by skin contact.
R36/38 - Irritating to eyes and skin.
R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed.

Directives 1999/45/EC and 91/155/EEC have been considered when compiling this SDS; the information is provided for health and safety assessment by an industrial user. Reference should be made to any relevent local or national health, safety, and environmental legislation. This information does not constitute indication of suitability for specific uses.