

This safety data sheet has been prepared in accordance with the requirements of EC Directives 1999/45/EC and 2001/58/EC and provides information relating to the safe handling and use of the product.

## 1. PRODUCT AND COMPANY INFORMATION

<b>Product Code</b>	0190378
<b>Trade Name</b>	3211
<b>Manufacturer/Supplier</b>	Henkel Loctite Adhesives Ltd.
<b>Address</b>	Watchmead, Welwyn Garden City, Herts., AL71JB. UK
<b>Phone Number</b>	01 707 358800
<b>Fax Number</b>	01 707 358900
<b>Emergency Phone Number</b>	+353-1-4599301/+353-87-2629625/+353-1-4046444

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

**Nature** U.V. curing adhesive.

### Hazardous Components in Product for EC

<b>Component Name</b>	<b>CAS / EINEC</b>	<b>Concentration</b>	<b>R Phrases</b>	<b>Classification</b>
Isobornyl Acrylate	5888-33-5 227-561-6	15.00 - 30.00	R36/37/38	Xi
2,2-Dimethoxy-2-diphenylethan-1-one	24650-42-8	1.00 - 5.00	R50/53	N
Urethane acrylate oligomer	None	60.00 - 100.00	R36/37/38	Xi
Hydroxyethylmethacrylate	868-77-9 212-782-2	5.00 - 15.00	R36/38, R43	Xi
Diphenyl (2,4,6-Trimethylbenzoyl) Phosphine Oxide	75980-60-8	1.00 - 5.00	R52/53	N

## 3. HAZARD IDENTIFICATION

Irritating to eyes, respiratory system and skin. May cause sensitisation by skin contact. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Care should be taken during the cure of these products by UV radiation to avoid exposure of the skin and especially of the eyes to direct or reflected UV radiation as longterm effects could be harmful.

## 4. FIRST AID MEASURES

### First Aid - Inhalation

Remove affected person to fresh air. Consideration should be given to the possible effects of a faulty UV source (Stray radiation, ozone).

### First Aid - Skin

Wash with plenty of soap and water. If irritation persists, seek medical advice.

### First Aid - Eyes

Flush eyes immediately with plenty of water for at least 15 minutes. Seek medical attention immediately.

### First Aid - Ingestion

Rinse mouth with water then give plenty of water to drink. Do not induce vomiting. Seek medical advice.

## 5. FIRE FIGHTING MEASURES

Non flammable product (flash point is 92°C (CC)). Trace amounts of toxic fumes may be released on incineration and the use of breathing apparatus is recommended. If product is involved in fire extinguish with dry powder, foam or carbon dioxide.

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**6. ACCIDENTAL RELEASE MEASURES**

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Absorb spillage onto inert absorbent material and place in a closed container, which should be partially filled (air space), for disposal.

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**7. HANDLING AND STORAGE**

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**Handling**

Loctite applicators are recommended to minimise skin contact, particularly where workers are handling sharp or threaded parts which might result in microlaceration of sensitive areas of the skin. Avoid contact with skin and eyes. Ventilation will remove any ozone that may be produced by the ultra violet lamp.

**Storage**

Store in original containers at 8°C-21°C and do not return residual materials to containers as contamination may reduce the shelf life of the bulk product.

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**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

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Rubber gloves and chemical goggles should be worn. Use of Loctite applicator equipment is recommended. UV lamp should be designed, installed and operated in such a way as to eliminate exposure of the skin and eyes to stray radiation.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

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<b>Physical State</b>	Liquid.
<b>Colour</b>	Pale. Yellow
<b>Odour</b>	Mild.
<b>pH</b>	Not determined.
<b>Boiling Range/Point (°C)</b>	Not determined.
<b>Flash Point (CC) (°C)</b>	92 (TAG CC)
<b>Specific Gravity</b>	1.09.
<b>Solubility in Water (kg/m<sup>3</sup>)</b>	Immiscible.
<b>Solubility in Acetone</b>	Miscible
<b>Vapour Pressure (mmHg @25°C)</b>	Less than 3 at 20 °C.
<b>Explosion Limits (%)</b>	Not determined.

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**10. STABILITY AND REACTIVITY**

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Non reactive to water. Polymerises in the presence of sunlight. Reactive to strong oxidising agents and reducing agents.

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**11. TOXICOLOGICAL INFORMATION**

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**Inhalation**

Irritating to respiratory system.

**Skin**

It is irritating and sensitising to the skin.

**Eyes**

This product is an irritant to the eyes.

**Ingestion**

May irritate the digestive tract. Ingestion of large quantities may cause damage to liver or kidneys.

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**12. ECOLOGICAL INFORMATION**

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Does not contain substances listed on the Montreal protocol.

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**13. DISPOSAL CONSIDERATIONS**

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Dispose of in accordance with local and national regulations.

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**14. TRANSPORT INFORMATION**

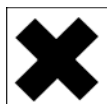
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UN Number	None
Air (IATA)	Not classified.
Sea (IMO)	Not classified.
Road (ADR)/Rail (RID)	Not classified.

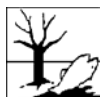
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**15. REGULATORY INFORMATION**

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**Contains****Labelling  
Information**

Irritant

Dangerous for  
the  
Environment

Hydroxyethyl methacrylate.

**R phrases**

R36/37/38 Irritating to eyes, respiratory system and skin.

R43 May cause sensitisation by skin contact.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**S phrases**

S24 Avoid contact with skin.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S28 After contact with skin, wash immediately with plenty of soap and water.

S37 Wear suitable gloves.

S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

**Voluntary Labelling**

N/A

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**16. OTHER INFORMATION**

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**MSDS data revised**

13 November 2002

**Hazardous Components in Product for EC****Component Name**Isobornyl Acrylate  
2,2-Dimethoxy-2-diphenylethan-1-one  
Urethane acrylate oligomer  
Hydroxyethylmethacrylate  
Diphenyl (2,4,6-Trimethylbenzoyl)  
Phosphine Oxide

R36/37/38

R36/38

R43

R50/53

R52/53

**R Phrases**

R36/37/38

R50/53

R36/37/38

R36/38, R43

R52/53

R36/37/38 Irritating to eyes, respiratory system and skin.

R36/38 Irritating to eyes and skin.

R43 May cause sensitisation by skin contact.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Prepared by:



## Loctite Corporation

Environmental Health & Safety Affairs  
Health & Regulatory Affairs - Europe

## SAFETY DATA SHEET

3211

0190378 4.00 IE EA 13.11.2002 MSDS\_IE

### Component Name

Dr. Sandra Wade  
Senior HRA Specialist  
Health & Regulatory Affairs - Europe Further Information may be obtained from:-

### R Phrases

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Supersedes Safety Data Sheet No: 3 dated 12/10/98. This safety data sheet was prepared in accordance with Commission Directive 2001/59/EC adapting to technical progress for the 28th time Council Directive 67/548/EEC and Commission Directive 1999/45/EC.

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