

3471A

Loctite Corporation

Environmental Health & Safety Affairs Health & Regulatory Affairs - Europe

210251 4.00 IE EA 08.11.2002 MSDS_IE

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

Product Code 210251 Trade Name 3471A

Manufacturer/Supplier Henkel Loctite Adhesives Ltd.

Address Watchmead,

Welwyn Garden City,

Herts., AL7IJB.

UK

 Phone Number
 01 707 358800

 Fax Number
 01 707 358900

Emergency Phone Number +353-1-4599301/+353-87-2629625/+353-1-4046444

2. COMPOSITION / INFORMATION ON INGREDIENTS

Nature Epoxy resin.

Hazardous Components in Product for EC

Component Name CAS / EINEC Concentration R Phrases Classification

Epoxy resin 25068-38-6 30.00 - 40.00 R36/38, R43, Xi, N

R51/53

Silicon dioxide - Quartz 14808-60-7 238- 1.00 - 5.00

878-4

3. HAZARD IDENTIFICATION

Irritating to eyes and skin. May cause sensitisation by skin contact. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. FIRST AID MEASURES

First Aid - Inhalation

Should not be a problem as product is of low volatility. However, if feeling unwell remove patient to fresh air.

First Aid - Skin

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

First Aid - Eyes

Flush eyes with plenty of water for at least 15 minutes. If irritation persists seek medical attention.

First Aid - Ingestion

Give plenty of water to drink. Do not induce vomiting. Obtain medical attention.

5. FIRE FIGHTING MEASURES

Non flammable product (flash point is greater than 100°C (CC)).

Wear self contained breathing apparatus. Protective clothing should be worn when dealing with fire. If product is involved in fire extinguish with dry powder, foam or carbon dioxide. Toxic fumes such as oxides of carbon may be released on incineration and these should not be inhaled.

6. ACCIDENTAL RELEASE MEASURES

Ventilate area.

For large spills absorb onto inert absorbent material and place in sealed container for disposal. For small spills wipe up with paper towel and place in container for disposal. Avoid prolonged or



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6. ACCIDENTAL RELEASE MEASURES

repeated skin contact. Do not flush into public water courses.

7. HANDLING AND STORAGE

Handling

Good industrial hygiene practices should be observed.

Use in well ventilated area. Prolonged or repeated skin contact should be avoided to minimise any risk of sensitisation. Safety glasses should be worn.

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. Store in a well ventilated area in sealed containers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure limits

Silicon dioxide - Quartz ACGIH: TLV 0.05mg/m3 8h TWA.

Use in well ventilated area. Good industrial hygiene practices should be observed. In circumstances where there is a potential for prolonged or repeated skin contact, the use of disposable gloves (polyethylene, natural rubber or equivalent ester-resistant material) is recommended. Safety glasses should be worn.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State
Colour
Grey.
Odour
Mild.

DH Not determined.

Boiling Range/Point (°C) > 100 Flash Point (CC) (°C) > 100

Specific Gravity 2.3 mg/m3 at 20 °C.

Solubility in Water (kg/m³)

Solubility in Acetone

Vapour Pressure (mmHg

Immiscible

Immiscible

Not determined.

@25°C)

Explosion Limits (%) Not determined.

10. STABILITY AND REACTIVITY

The product is relatively stable under normal conditions of use.

11. TOXICOLOGICAL INFORMATION

Inhalation

May cause irritation to respiratory system and mucous membranes if used in confined spaces.

Skin

It is irritating and sensitising to the skin.

Eyes

This product is an irritant to the eyes.



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11. TOXICOLOGICAL INFORMATION

Ingestion

This product is considered to be of low toxicity.

12. ECOLOGICAL INFORMATION

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

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with local and national regulations.

14. TRANSPORT INFORMATION

UN Number None

Air (IATA)

Sea (IMO)

Road (ADR)/Rail (RID)

Not classified.

Not classified.

15. REGULATORY INFORMATION

Contains Contains epoxy constituents. See information supplied by

the manufacturer.

Labelling Information



Irritant



Dangerous for the Environment

R phrases R36/38 Irritating to eyes 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

16. OTHER INFORMATION

MSDS data revised 8 November 2002

Hazardous Components in Product for EC

Component NameR PhrasesEpoxy resinR36/38, R43,R51/53

Silicon dioxide - Quartz

R36/38 R36/38 Irritating to eyes 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.

Further Information may be obtained from:-

LOCTITELoctite Corporation

Loctite Corporation

Environmental Health & Safety Affairs Health & Regulatory Affairs - Europe

SAFETY DATA SHEET

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R Phrases

Component Name

Loctite Corporation, Health and Regulatory Affairs - Europe, Tallaght Business Park, Whitestown, Dublin 24, Ireland.

Tel: +353-1-4046444. Fax: +353-1-4510806.

Prepared by:

Dr. Sandra Wade Senior HRA Specialist Health & Regulatory Affairs - Europe

The information in this safety data sheet was obtained from reputable sources and to the best of our knowledge is accurate and current at the mentioned date. Neither Loctite nor its subsidiary companies accept any liability arising out of the use of the information provided here or the use, application or processing of the product(s) described herein. Attention of users is drawn to the possible hazards from improper use of the product(s). Supersedes Safety Data Sheet No: 3 dated 25/1/99.

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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Loctite Corporation

Environmental Health & Safety Affairs Health & Regulatory Affairs - Europe

210252 6.00 IE EA 08.11.2002 MSDS_IE

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

Product Code 210252 Trade Name 3471B

Manufacturer/Supplier Henkel Loctite Adhesives Ltd.

Address Watchmead,

Welwyn Garden City,

Herts., AL7IJB.

UK

 Phone Number
 01 707 358800

 Fax Number
 01 707 358900

Emergency Phone Number +353-1-4599301/+353-87-2629625/+353-1-4046444

2. COMPOSITION / INFORMATION ON INGREDIENTS

Nature Hardener for epoxy resin.

Hazardous Components in Product for EC

Component Name CAS / EINEC Concentration R Phrases Classification

Bisphenol A 80-05-7 201- 1.00 - 5.00 R36/37/38, R43 Xi

245-8

Aminopolyamide 68082-29-1 10.00 - 30.00 R36/38, R43 Xi

Silicon dioxide - Quartz 14808-60-7 238- 1.00 - 5.00

878-4

3. HAZARD IDENTIFICATION

Irritating to eyes and skin. May cause sensitisation by skin contact.

4. FIRST AID MEASURES

First Aid - Inhalation

Should not be a problem as product is of low volatility. However, if feeling unwell remove patient to fresh air.

First Aid - Skin

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

First Aid - Eyes

Flush eyes with plenty of water for at least 15 minutes. If irritation persists seek medical attention.

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 greater than 100°C (CC)).

Self contained breathing apparatus should be worn when dealing with fire. Protective clothing should be worn when dealing with fire. If product is involved in fire extinguish with dry powder, foam or carbon dioxide. Toxic fumes such as oxides of carbon may be released on incineration and these should not be inhaled.

6. ACCIDENTAL RELEASE MEASURES

Avoid inhalation in unventilated areas.



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6. ACCIDENTAL RELEASE MEASURES

Wear gloves and eye protection. Contain spillage, and absorb onto an inert absorbent such as sand or multisorb and place in a sealed container for supervised disposal. For small spills wipe up with paper towel and place in container for disposal. Wash spillage site thoroughly with soap and water or detergent solution. Do not flush into public water courses.

7. HANDLING AND STORAGE

Handling

Good industrial hygiene practices should be observed.

Avoid contact with skin and eyes. Prolonged or repeated skin contact should be avoided to minimise any risk of sensitisation.

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.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure limits

Silicon dioxide - Quartz

ACGIH: TLV 0.05mg/m3 8h TWA.

Use in well ventilated area. Good industrial hygiene practices should be observed.

Wear suitable protective clothing, safety glasses and gloves. In circumstances where there is a potential for prolonged or repeated skin contact, the use of disposable gloves (polyethylene, natural rubber or equivalent ester-resistant material) is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State

Colour

Odour

Paint

Ph

No data.

Boiling Range/Point (°C)

Flash Point (CC) (°C)

Specific Gravity

Paste.

Grey.

Faint

No data.

> 100

> 100

> 2.4.

Solubility in Water (kg/m³) Partially miscible

Solubility in Acetone Miscible Vapour Pressure (mmHq No data.

@25°C)

Explosion Limits (%) No data.

10. STABILITY AND REACTIVITY

The product is relatively stable under normal conditions of use.

11. TOXICOLOGICAL INFORMATION

Inhalation

May cause irritation to respiratory system and mucous membranes if used in confined spaces.

Skin

It is irritating and sensitising to the skin.

Eyes

This product is an irritant to the eyes.



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11. TOXICOLOGICAL INFORMATION

Ingestion

This material is considered to have low toxicity if swallowed. Acute oral LD50 (rat) > 5000 mg/kg.

ECOLOGICAL INFORMATION 12.

No information available.

DISPOSAL CONSIDERATIONS 13.

Dispose of in accordance with local and national regulations. Incinerate or bury in legal landfill.

14. TRANSPORT INFORMATION

UN Number

Not classified. Air (IATA) Not classified. Sea (IMO) Not classified. Road (ADR)/Rail (RID)

15. REGULATORY INFORMATION

Bisphenol A **Contains** Aminopolyamide

Labelling Information



Irritant

R36/38 Irritating to eyes and skin. R phrases

R43 May cause sensitisation by skin contact.

S24 Avoid contact with skin. S phrases

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

soap and water.

S37 Wear suitable gloves.

N/A Voluntary Labelling

16. OTHER INFORMATION

MSDS data revised

8 November 2002

Hazardous Components in Product for EC

Component Name R Phrases Bisphenol A R36/37/38, R43 R36/38, R43 Aminopolyamide

Silicon dioxide - Quartz

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

R36/38 R36/38 Irritating to eyes and skin.

R43 May cause sensitisation by skin contact.

Further Information may be obtained from:-

Loctite Corporation,

Health and Regulatory Affairs - Europe,

Tallaght Business Park,

Whitestown,

LOCTITELoctite Corporation

SAFETY DATA SHEET

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210252 6.00 IE EA 08.11.2002 MSDS_IE

Environmental Health & Safety Affairs Health & Regulatory Affairs - Europe

Component Name

Dublin 24, Ireland.

Tel: +353-1-4046444. Fax: +353-1-4510806.

Prepared by:

Dr. Sandra Wade Senior HRA Specialist Health & Regulatory Affairs - Europe R Phrases

The information in this safety data sheet was obtained from reputable sources and to the best of our knowledge is accurate and current at the mentioned date. Neither Loctite nor its subsidiary companies accept any liability arising out of the use of the information provided here or the use, application or processing of the product(s) described herein. Attention of users is drawn to the possible hazards from improper use of the product(s). Supersedes Safety Data Sheet No: 5 dated 1/2/99.

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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Loctite Corporation

Environmental Health & Safety Affairs Health & Regulatory Affairs - Europe

210253 3.00 IE EA 08.11.2002 MSDS_IE

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

Product Code 210253 Trade Name 3472A

Manufacturer/Supplier Henkel Loctite Adhesives Ltd.

Address Watchmead,

Welwyn Garden City,

Herts., AL7IJB.

UK

 Phone Number
 01 707 358800

 Fax Number
 01 707 358900

Emergency Phone Number +353-1-4599301/+353-87-2629625/+353-1-4046444

2. COMPOSITION / INFORMATION ON INGREDIENTS

Nature Epoxy resin.

Hazardous Components in Product for EC

Component Name CAS / EINEC Concentration R Phrases Classification

Epoxy resin 25068-38-6 30.00 - 60.00 R36/38, R43, Xi, N

R51/53

Silicon dioxide - Quartz 14808-60-7 238- 0.50 - 5.00

878-4

3. HAZARD IDENTIFICATION

Irritating to eyes and skin. May cause sensitisation by skin contact. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. FIRST AID MEASURES

First Aid - Inhalation

Remove affected person to fresh air, and if still feeling unwell seek medical attention.

First Aid - Skin

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

First Aid - Eyes

Flush eyes with plenty of water for at least 15 minutes. If irritation persists seek medical attention.

First Aid - Ingestion

Give plenty of water to drink. Do not induce vomiting. Obtain medical attention.

5. FIRE FIGHTING MEASURES

Non flammable product (flash point is greater than 100°C (CC)).

Self contained breathing apparatus should be worn when dealing with fire. Protective clothing should be worn when dealing with fire. If product is involved in fire extinguish with dry powder, foam or carbon dioxide. Toxic fumes such as oxides of carbon may be released on incineration and these should not be inhaled.

6. ACCIDENTAL RELEASE MEASURES

Ventilate area.

For large spills absorb onto inert absorbent material and place in sealed container for disposal. For small spills wipe up with paper towel and place in container for disposal. Avoid prolonged or



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6. ACCIDENTAL RELEASE MEASURES

repeated skin contact. Do not flush into public water courses.

7. HANDLING AND STORAGE

Handling

Good industrial hygiene practices should be observed.

Use in well ventilated area. Prolonged or repeated skin contact should be avoided to minimise any risk of sensitisation. Safety glasses should be worn.

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. Store in a well ventilated area in sealed containers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure limits

Silicon dioxide - Quartz ACGIH: TLV 0.05mg/m3 8h TWA.

Use in well ventilated area. Good industrial hygiene practices should be observed. In circumstances where there is a potential for prolonged or repeated skin contact, the use of disposable gloves (polyethylene, natural rubber or equivalent ester-resistant material) is recommended. Safety glasses should be worn.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Paste.
Colour Grey.
Odour Epoxy

pH Not applicable.

Boiling Range/Point (°C) > 100 Flash Point (CC) (°C) > 100 Specific Gravity 2.35.

Solubility in Water (kg/m³) Immiscible.

Solubility in Acetone Miscible

Vapour Pressure (mmHg No data.

@25°C)

Explosion Limits (%) No data.

10. STABILITY AND REACTIVITY

The product is relatively stable under normal conditions of use.

11. TOXICOLOGICAL INFORMATION

Inhalation

May cause irritation to respiratory system and mucous membranes if used in confined spaces.

Skin

It is irritating and sensitising to the skin.

Eyes

This product is an irritant to the eyes.



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11. TOXICOLOGICAL INFORMATION

Ingestion

This product is considered to be of low toxicity.

12. ECOLOGICAL INFORMATION

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

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with local and national regulations. Incinerate or bury in legal landfill.

14. TRANSPORT INFORMATION

UN Number None

Air (IATA)

Sea (IMO)

Road (ADR)/Rail (RID)

Not classified.

Not classified.

15. REGULATORY INFORMATION

Contains Contains epoxy constituents. See information supplied by

the manufacturer.

Labelling Information



Irritant



Dangerous for the Environment

R phrases R36/38 Irritating to eyes 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

16. OTHER INFORMATION

MSDS data revised 8 November 2002

Hazardous Components in Product for EC

Component Name R Phrases
Epoxy resin R36/38, R43,
R51/53

Silicon dioxide - Quartz

R36/38 R36/38 Irritating to eyes 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.

Further Information may be obtained from:-

LOCTITELoctite Corporation

SAFETY DATA SHEET

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210253 3.00 IE EA 08.11.2002 MSDS_IE

Environmental Health & Safety Affairs Health & Regulatory Affairs - Europe

Component Name

Loctite Corporation, Health and Regulatory Affairs - Europe, Tallaght Business Park, Whitestown, Dublin 24, Ireland.

Tel: +353-1-4046444. Fax: +353-1-4510806.

Prepared by:

Dr. Sandra Wade Senior HRA Specialist Health & Regulatory Affairs - Europe R Phrases

The information in this safety data sheet was obtained from reputable sources and to the best of our knowledge is accurate and current at the mentioned date. Neither Loctite nor its subsidiary companies accept any liability arising out of the use of the information provided here or the use, application or processing of the product(s) described herein. Attention of users is drawn to the possible hazards from improper use of the product(s). Supersedes Safety Data Sheet No: 2 dated 1/2/99.

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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Loctite Corporation

Environmental Health & Safety Affairs Health & Regulatory Affairs - Europe

210254 5.00 IE EA 08.11.2002 MSDS_IE

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

Product Code 210254 Trade Name 3472B

Manufacturer/Supplier Henkel Loctite Adhesives Ltd.

Address Watchmead,

Welwyn Garden City,

Herts., AL7IJB.

UK

Phone Number 01 707 358800 Fax Number 01 707 358900

Emergency Phone Number +353-1-4599301/+353-87-2629625/+353-1-4046444

2. COMPOSITION / INFORMATION ON INGREDIENTS

Nature Hardener for epoxy resin.

Hazardous Components in Product for EC

Component Name CAS / EINEC Concentration R Phrases Classification

Bisphenol A 80-05-7 201- 0.10 - 5.00 R36/37/38, R43 Xi

245-8

Aminopolyamide 68082-29-1 10.00 - 25.00 R36/38, R43 Xi

Silicon dioxide - Quartz 14808-60-7 238- 1.00 - 5.00

878-4

3. HAZARD IDENTIFICATION

Irritating to eyes and skin. May cause sensitisation by skin contact.

4. FIRST AID MEASURES

First Aid - Inhalation

Should not be a problem as product is of low volatility. However, if feeling unwell remove patient to fresh air.

First Aid - Skin

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

First Aid - Eyes

Flush eyes with plenty of water for at least 15 minutes. If irritation persists seek medical attention.

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 greater than 100°C (CC)).

Self contained breathing apparatus should be worn when dealing with fire. Protective clothing should be worn when dealing with fire. If product is involved in fire extinguish with dry powder, foam or carbon dioxide. Toxic fumes such as oxides of carbon may be released on incineration and these should not be inhaled.

6. ACCIDENTAL RELEASE MEASURES

Avoid inhalation in unventilated areas.



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Loctite Corporation

Environmental Health & Safety Affairs Health & Regulatory Affairs - Europe

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6. ACCIDENTAL RELEASE MEASURES

Wear gloves and eye protection. Contain spillage, and absorb onto an inert absorbent such as sand or multisorb and place in a sealed container for supervised disposal. For small spills wipe up with paper towel and place in container for disposal. Wash spillage site thoroughly with detergent and water. Do not flush into public water courses.

7. HANDLING AND STORAGE

Handling

Good industrial hygiene practices should be observed.

Avoid contact with skin and eyes. Prolonged or repeated skin contact should be avoided to minimise any risk of sensitisation.

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.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure limits

Silicon dioxide - Quartz

ACGIH: TLV 0.05mg/m3 8h TWA.

Use in well ventilated area. Good industrial hygiene practices should be observed.

Wear suitable protective clothing, safety glasses and gloves. In circumstances where there is a potential for prolonged or repeated skin contact, the use of disposable gloves (polyethylene, natural rubber or equivalent ester-resistant material) is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Viscous liquid.

Colour

Odour

PH

No data.

Boiling Range/Point (°C)

Flash Point (CC) (°C)

Specific Gravity

Grey.

Mild.

No data.

>100

>100

>100

>2.45.

Solubility in Water (kg/m³) Partially miscible

Solubility in Acetone Miscible Vapour Pressure (mmHq No data.

@25°C)

Explosion Limits (%) No data.

10. STABILITY AND REACTIVITY

The product is relatively stable under normal conditions of use.

11. TOXICOLOGICAL INFORMATION

Inhalation

May cause irritation to respiratory system and mucous membranes if used in confined spaces.

Skin

It is irritating and sensitising to the skin.

Eyes

This product is an irritant to the eyes.



Loctite Corporation

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Environmental Health & Safety Affairs Health & Regulatory Affairs - Europe

11. TOXICOLOGICAL INFORMATION

Ingestion

This material is considered to have low toxicity if swallowed. Acute oral LD50 (rat) > 5000 mg/kg.

12. ECOLOGICAL INFORMATION

No information available.

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with local and national regulations. Incinerate or bury in legal landfill.

14. TRANSPORT INFORMATION

UN Number None

Air (IATA)

Sea (IMO)

Road (ADR)/Rail (RID)

Not classified.

Not classified.

Not classified.

15. REGULATORY INFORMATION

Contains

Bisphenol A

Aminopolyamide

Labelling Information



Irritant

R phrases R36/38 Irritating to eyes and skin.

R43 May cause sensitisation by skin contact.

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.

Voluntary Labelling N/A

16. OTHER INFORMATION

MSDS data revised

8 November 2002

Hazardous Components in Product for EC

Component NameR PhrasesBisphenol AR36/37/38, R43AminopolyamideR36/38, R43

Silicon dioxide - Quartz

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

R36/38 Irritating to eyes and skin.

R43 May cause sensitisation by skin contact.

Further Information may be obtained from:-

Loctite Corporation,

Health and Regulatory Affairs - Europe,

Tallaght Business Park,

Whitestown, Dublin 24, Ireland.

LOCTITELoctite Corporation

SAFETY DATA SHEET

3472B

210254 5.00 IE EA 08.11.2002 MSDS_IE

R Phrases

Environmental Health & Safety Affairs Health & Regulatory Affairs - Europe

Component Name

Tel: +353-1-4046444. Fax: +353-1-4510806.

Prepared by:

Dr. Sandra Wade Senior HRA Specialist Health & Regulatory Affairs - Europe

The information in this safety data sheet was obtained from reputable sources and to the best of our knowledge is accurate and current at the mentioned date. Neither Loctite nor its subsidiary companies accept any liability arising out of the use of the information provided here or the use, application or processing of the product(s) described herein. Attention of users is drawn to the possible hazards from improper use of the product(s).

Supersedes Safety Data Sheet No: 4 dated 1/2/99.

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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210255 5.00 IE EA 08.11.2002 MSDS_IE

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1. PRODUCT AND COMPANY INFORMATION

Product Code 210255 Trade Name 3473A

Manufacturer/Supplier Henkel Loctite Adhesives Ltd.

Address Watchmead,

Welwyn Garden City,

Herts., AL7IJB.

UK

 Phone Number
 01 707 358800

 Fax Number
 01 707 358900

Emergency Phone Number +353-1-4599301/+353-87-2629625/+353-1-4046444

2. COMPOSITION / INFORMATION ON INGREDIENTS

Nature Epoxy resin.

Hazardous Components in Product for EC

Component Name CAS / EINEC Concentration R Phrases Classification

Epoxy resin 25068-38-6 30.00 - 40.00 R36/38, R43, Xi, N

R51/53

14808-60-7 238- 1.00 - 5.00

878-4

3. HAZARD IDENTIFICATION

Irritating to eyes and skin. May cause sensitisation by skin contact. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. FIRST AID MEASURES

First Aid - Inhalation

Silicon dioxide - Quartz

Remove affected person to fresh air, and if still feeling unwell seek medical attention.

First Aid - Skin

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

First Aid - Eyes

Flush eyes with plenty of water for at least 15 minutes. If irritation persists seek medical attention.

First Aid - Ingestion

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

5. FIRE FIGHTING MEASURES

Non flammable product (flash point is greater than 100°C (CC)). If product is involved in fire extinguish with dry powder, foam or carbon dioxide. Toxic fumes such as oxides of carbon may be released on incineration and these should not be inhaled. Self contained breathing apparatus should be worn when dealing with fire.

6. ACCIDENTAL RELEASE MEASURES

For small spills wipe up with paper towel and place in container for disposal. For large spills absorb onto inert absorbent material and place in sealed container for disposal.



Loctite Corporation

SAFETY DATA SHEET

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210255 5.00 IE EA 08.11.2002 MSDS_IE

Environmental Health & Safety Affairs Health & Regulatory Affairs - Europe

7. HANDLING AND STORAGE

Handling

Avoid contact with skin and eyes.

Storage

Keep container well sealed and protect from humidity at temperatures between 15 - 25°C in a well-ventilated area.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure limits

Silicon dioxide - Quartz ACGIH: TLV 0.05mg/m3 8h TWA.

In circumstances where there is a potential for prolonged or repeated skin contact, the use of disposable gloves (polyethylene, natural rubber or equivalent ester-resistant material) is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State
Colour
Grey.
Odour
Epoxy

pH Not determined.

Boiling Range/Point (°C) Not determined.

Flash Point (CC) (°C) >110 (Pensky-Martens)

Specific Gravity

Solubility in Water (kg/m³)

Solubility in Acetone

2300 kg/m3.

Immiscible.

Miscible

Vapour Pressure (mmHg

@25°C)

Explosion Limits (%) Not determined.

10. STABILITY AND REACTIVITY

The product is relatively stable under normal conditions of use.

11. TOXICOLOGICAL INFORMATION

Inhalation

May cause irritation to respiratory system and mucous membranes if used in confined spaces.

Not determined.

Skin

It is irritating and sensitising to the skin.

Eyes

This product is an irritant to the eyes.

Ingestion

This product is considered to be of low toxicity.

12. ECOLOGICAL INFORMATION

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



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Environmental Health & Safety Affairs Health & Regulatory Affairs - Europe

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with local and national regulations. Incinerate or bury in legal landfill.

14. TRANSPORT INFORMATION

UN Number None

Air (IATA)

Sea (IMO)

Road (ADR)/Rail (RID)

Not classified.

Not classified.

Not classified.

15. REGULATORY INFORMATION

Contains Contains epoxy constituents. See information supplied by

the manufacturer.

Labelling Information



Irritant



Dangerous for the Environment

R phrases R36/38 Irritating to eyes 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

16. OTHER INFORMATION

MSDS data revised 8 November 2002

Hazardous Components in Product for EC

Component NameR PhrasesEpoxy resinR36/38, R43,R51/53

Silicon dioxide - Quartz

R36/38 R36/38 Irritating to eyes 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.

Further Information may be obtained from:-

Loctite Corporation, Health and Regulatory Affairs - Europe, Tallaght Business Park, Whitestown, Dublin 24, Ireland.

LOCTITELoctite Corporation

SAFETY DATA SHEET

3473A

210255 5.00 IE EA 08.11.2002 MSDS_IE

Environmental Health & Safety Affairs Health & Regulatory Affairs - Europe

Component Name

Tel: +353-1-4046444. Fax: +353-1-4510806.

Prepared by:

Dr. Sandra Wade Senior HRA Specialist Health & Regulatory Affairs - Europe R Phrases

The information in this safety data sheet was obtained from reputable sources and to the best of our knowledge is accurate and current at the mentioned date. Neither Loctite nor its subsidiary companies accept any liability arising out of the use of the information provided here or the use, application or processing of the product(s) described herein. Attention of users is drawn to the possible hazards from improper use of the product(s). Supersedes Safety Data Sheet No: 4 dated 26/7/99.

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.



3473B

Loctite Corporation

Environmental Health & Safety Affairs Health & Regulatory Affairs - Europe

210256 4.00 IE EA 11.11.2002 MSDS_IE

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

Product Code 210256 Trade Name 3473B

Manufacturer/Supplier Henkel Loctite Adhesives Ltd.

Address Watchmead,

Welwyn Garden City,

Herts., AL7IJB.

UK

 Phone Number
 01 707 358800

 Fax Number
 01 707 358900

Emergency Phone Number +353-1-4599301/+353-87-2629625/+353-1-4046444

2. COMPOSITION / INFORMATION ON INGREDIENTS

Nature Hardener for epoxy resin.

Hazardous Components in Product for EC

Component Name CAS / EINEC Concentration R Phrases Classification

2,4,6-Tris (Dimethylaminomethyl) phenol 90-72-2 202- 1.00 - 5.00 R22, R36/38 Xn

013-9

Silicon dioxide - Quartz 14808-60-7 238- 1.00 - 5.00

878-4

3. HAZARD IDENTIFICATION

Not classified as hazardous. Slightly irritating to eyes.

4. FIRST AID MEASURES

First Aid - Inhalation

Should not be a problem as product is of low volatility. However, if feeling unwell remove patient to fresh air.

First Aid - Skin

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

First Aid - Eyes

Flush eyes with plenty of water for at least 15 minutes. If irritation persists seek medical attention.

First Aid - Ingestion

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

5. FIRE FIGHTING MEASURES

Non flammable product (flash point is greater than 100°C (CC)). Self contained breathing apparatus should be worn when dealing with fire. If product is involved in fire extinguish with dry powder, foam or carbon dioxide. Toxic fumes such as oxides of carbon may be released on incineration and these should not be inhaled.

6. ACCIDENTAL RELEASE MEASURES

For small spills wipe up with paper towel and place in container for disposal. For large spills absorb onto inert absorbent material and place in sealed container for disposal.



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Environmental Health & Safety Affairs Health & Regulatory Affairs - Europe

7. HANDLING AND STORAGE

Handling

No special handling requirements. Prolonged or repeated skin contact should be avoided to minimise any risk of sensitisation.

Storage

Keep container well sealed and protect from humidity at temperatures between 15 - 25°C in a well-ventilated area.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure limits

Silicon dioxide - Quartz ACGIH: TLV 0.05mg/m3 8h TWA.

Good industrial hygiene practices should be observed. Gloves and safety glasses should be worn.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Paste.
Colour Grey.

Odour Characteristic.

pH >10

Boiling Range/Point (°C) Not determined.

Flash Point (CC) (°C) >110

Specific Gravity

Solubility in Water (kg/m³)

2000kg/m3.

Partially soluble.

Solubility in Acetone Miscible

Vapour Pressure (mmHg

@25°C)

Not determined.

Explosion Limits (%) Not determined.

10. STABILITY AND REACTIVITY

The product is relatively stable under normal conditions of use.

11. TOXICOLOGICAL INFORMATION

Inhalation

May cause irritation to respiratory system.

Skin

Prolonged contact may cause some irritation.

Eyes

May cause irritation to the eyes.

Ingestion

This product is considered to be of low toxicity.

12. ECOLOGICAL INFORMATION

No information available.

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with local and national regulations.



SAFETY DATA SHEET **Loctite Corporation**

Environmental Health & Safety Affairs Health & Regulatory Affairs - Europe

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TRANSPORT INFORMATION 14.

None **UN Number**

Not classified. Air (IATA) Not classified. Sea (IMO) Not classified. Road (ADR)/Rail (RID)

15. REGULATORY INFORMATION

N/A **Contains**

Labelling Information

> None. R phrases S phrases None.

Safety data sheet available for professional user on Voluntary Labelling

request.

16. OTHER INFORMATION

11 November 2002 MSDS data revised

Hazardous Components in Product for EC

Component Name R Phrases 2,4,6-Tris (Dimethylaminomethyl) phenol R22. R36/38

Silicon dioxide - Quartz

R22 R22 Harmful if swallowed. R36/38 R36/38 Irritating to eyes and skin.

Further Information may be obtained from:-

Loctite Corporation, Health and Regulatory Affairs - Europe, Tallaght Business Park, Whitestown. Dublin 24. Ireland.

Tel: +353-1-4046444. Fax: +353-1-4510806.

Prepared by:

Dr. Sandra Wade Senior HRA Specialist Health & Regulatory Affairs - Europe

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Supersedes Safety Data Sheet No: 3 dated 11/9/98.

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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210256 4.00 IE EA 11.11.2002 MSDS_IE

Environmental Health & Safety Affairs
Health & Regulatory Affairs - Europe



3475A

Loctite Corporation

Environmental Health & Safety Affairs Health & Regulatory Affairs - Europe

210259 5.00 IE EA 22.11.2002 MSDS_IE

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

Product Code 210259 Trade Name 3475A

Manufacturer/Supplier Henkel Loctite Adhesives Ltd.

Address Watchmead,

Welwyn Garden City,

Herts., AL7IJB.

UK

 Phone Number
 01 707 358800

 Fax Number
 01 707 358900

Emergency Phone Number +353-1-4599301/+353-87-2629625/+353-1-4046444

2. COMPOSITION / INFORMATION ON INGREDIENTS

Nature Epoxy resin.

Hazardous Components in Product for EC

Component Name CAS / EINEC Concentration R Phrases Classification

Epoxy resin 25068-38-6 30.00 - 60.00 R36/38, R43, Xi, N

R51/53

Silicon dioxide - Quartz 14808-60-7 238- 1.00 - 5.00

878-4

3. HAZARD IDENTIFICATION

Irritating to eyes and skin. May cause sensitisation by skin contact. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. FIRST AID MEASURES

First Aid - Inhalation

Should not be a problem as product is of low volatility. However, if feeling unwell remove patient to fresh air.

First Aid - Skin

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

First Aid - Eyes

Flush eyes with plenty of water for at least 15 minutes. If irritation persists seek medical attention.

First Aid - Ingestion

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

5. FIRE FIGHTING MEASURES

Non flammable product (flash point is greater than 100°C (CC)). If product is involved in fire extinguish with dry powder, foam or carbon dioxide. Toxic fumes such as oxides of carbon may be released on incineration and these should not be inhaled. Self contained breathing apparatus should be worn when dealing with fire.

6. ACCIDENTAL RELEASE MEASURES

For small spills wipe up with paper towel and place in container for disposal. Wash spillage site thoroughly with soap and water or detergent solution. Try to prevent the material from entering drains or water courses.



Loctite Corporation

SAFETY DATA SHEET

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210259 5.00 IE EA 22.11.2002 MSDS_IE

Environmental Health & Safety Affairs Health & Regulatory Affairs - Europe

7. HANDLING AND STORAGE

Handling

Avoid contact with skin and eyes.

Storage

Keep container well sealed and protect from humidity at temperatures between 15 - 25°C in a well-ventilated area.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure limits

Silicon dioxide - Quartz ACGIH: TLV 0.05mg/m3 8h TWA.

In circumstances where there is a potential for prolonged or repeated skin contact, the use of disposable gloves (polyethylene, natural rubber or equivalent ester-resistant material) is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Paste.
Colour Grey.
Odour Epoxy

pH Not determined.

Boiling Range/Point (°C) Not determined.

Flash Point (CC) (°C) > 110

Specific Gravity

Solubility in Water (kg/m³)

Solubility in Acetone

1760 kg/m3.

Immiscible.

Soluble

Vapour Pressure (mmHg

@25°C)

Explosion Limits (%) Not determined.

10. STABILITY AND REACTIVITY

The product is relatively stable under normal conditions of use.

11. TOXICOLOGICAL INFORMATION

Inhalation

May cause irritation to respiratory system and mucous membranes if used in confined spaces.

Not determined.

Skin

It is irritating and sensitising to the skin.

Eyes

This product is an irritant to the eyes.

Ingestion

This product is considered to be of low toxicity.

12. ECOLOGICAL INFORMATION

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



Loctite Corporation

SAFETY DATA SHEET

3475A

210259 5.00 IE EA 22.11.2002 MSDS_IE

Environmental Health & Safety Affairs Health & Regulatory Affairs - Europe

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with local and national regulations. Incinerate or bury in legal landfill.

14. TRANSPORT INFORMATION

UN Number None.

Air (IATA)

Sea (IMO)

Road (ADR)/Rail (RID)

Not classified.

Not classified.

15. REGULATORY INFORMATION

ContainsContains epoxy constituents. See information supplied by the manufacturer.

Labelling Information



Irritant



Dangerous for the Environment

R phrases R36/38 Irritating to eyes 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

16. OTHER INFORMATION

MSDS data revised 22 November 2002

Hazardous Components in Product for EC

Component NameR PhrasesEpoxy resinR36/38, R43,R51/53

Silicon dioxide - Quartz

R36/38 R36/38 Irritating to eyes and skin.

R43 May cause sensitisation by skin contact.

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

the aquatic environment.

Further Information may be obtained from:-

Loctite Corporation,
Health and Regulatory Affairs - Europe,
Tallaght Business Park,
Whitestown,
Dublin 24,
Ireland.

LOCTITELoctite Corporation

SAFETY DATA SHEET

3475A

210259 5.00 IE EA 22.11.2002 MSDS_IE

Environmental Health & Safety Affairs Health & Regulatory Affairs - Europe

Component Name

Tel: +353-1-4046444. Fax: +353-1-4510806.

Prepared by:

Dr. Sandra Wade Senior HRA Specialist Health & Regulatory Affairs - Europe **R Phrases**

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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.



3475B

Loctite Corporation

Environmental Health & Safety Affairs Health & Regulatory Affairs - Europe

210260 6.00 IE EA 22.11.2002 MSDS_IE

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

Product Code 210260 Trade Name 3475B

Manufacturer/Supplier Henkel Loctite Adhesives Ltd.

Address Watchmead,

Welwyn Garden City,

Herts., AL7IJB.

UK

 Phone Number
 01 707 358800

 Fax Number
 01 707 358900

Emergency Phone Number +353-1-4599301/+353-87-2629625/+353-1-4046444

2. COMPOSITION / INFORMATION ON INGREDIENTS

Nature Hardener for epoxy resin.

Hazardous Components in Product for EC

Component Name CAS / EINEC Concentration R Phrases Classification

Bisphenol A 80-05-7 201- 1.00 - 5.00 R36/37/38, R43 Xi

245-8

Aminopolyamide 68082-29-1 10.00 - 30.00 R36/38, R43 Xi

Silicon dioxide - Quartz 14808-60-7 238- 1.00 - 5.00

878-4

3. HAZARD IDENTIFICATION

Irritating to eyes and skin. May cause sensitisation by skin contact.

4. FIRST AID MEASURES

First Aid - Inhalation

Should not be a problem as product is of low volatility. However, if feeling unwell remove patient to fresh air.

First Aid - Skin

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

First Aid - Eyes

Flush eyes with plenty of water for at least 15 minutes. If irritation persists seek medical attention.

First Aid - Ingestion

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

5. FIRE FIGHTING MEASURES

Non flammable product (flash point is greater than 100°C (CC)). If product is involved in fire extinguish with dry powder, foam or carbon dioxide. Toxic fumes such as oxides of carbon may be released on incineration and these should not be inhaled. Self contained breathing apparatus should be worn when dealing with fire.

6. ACCIDENTAL RELEASE MEASURES

For small spills wipe up with paper towel and place in container for disposal. Wash spillage site thoroughly with soap and water or detergent solution.



Loctite Corporation

Environmental Health & Safety Affairs Health & Regulatory Affairs - Europe

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HANDLING AND STORAGE 7.

Handling

Avoid contact with skin and eyes.

Storage

Keep container well sealed and protect from humidity at temperatures between 15 - 25°C in a wellventilated area.

EXPOSURE CONTROLS / PERSONAL PROTECTION 8.

Occupational exposure limits

ACGIH: TLV 0.05mg/m3 8h TWA. Silicon dioxide - Quartz

In circumstances where there is a potential for prolonged or repeated skin contact, the use of disposable gloves (polyethylene, natural rubber or equivalent ester-resistant material) is recommended.

PHYSICAL AND CHEMICAL PROPERTIES 9.

Paste. **Physical State** Colour Grey.

Characteristic. Odour Not determined. pН Not determined. **Boiling Range/Point (°C)**

>110 Flash Point (CC) (°C)

1750kg/m3. **Specific Gravity** Immiscible. Solubility in Water (kg/m³) Miscible **Solubility in Acetone**

Vapour Pressure (mmHg

@25°C)

Not determined. **Explosion Limits (%)**

10. STABILITY AND REACTIVITY

The product is relatively stable under normal conditions of use.

11. TOXICOLOGICAL INFORMATION

Inhalation

May cause irritation to respiratory system and mucous membranes if used in confined spaces.

Not determined.

It is irritating and sensitising to the skin.

Eves

This product is an irritant to the eyes.

Ingestion

This product is considered to be of low toxicity. Acute oral LD50 (rat) > 5000 mg/kg.

12. **ECOLOGICAL INFORMATION**

No information available.



3475B

Loctite Corporation

Environmental Health & Safety Affairs Health & Regulatory Affairs - Europe

210260 6.00 IE EA 22.11.2002 MSDS_IE

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with local and national regulations. Incinerate or bury in legal landfill.

14. TRANSPORT INFORMATION

UN Number None

Air (IATA)

Sea (IMO)

Road (ADR)/Rail (RID)

Not classified.

Not classified.

15. REGULATORY INFORMATION

Contains Aminopolyamide Bisphenol A

Labelling Information



Irritant

R phrases R36/38 Irritating to eyes and skin.

R43 May cause sensitisation by skin contact.

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.

Voluntary Labelling N/A

16. OTHER INFORMATION

MSDS data revised

22 November 2002

Hazardous Components in Product for EC

Component NameR PhrasesBisphenol AR36/37/38, R43AminopolyamideR36/38, R43

Silicon dioxide - Quartz

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

R36/38 R36/38 Irritating to eyes and skin.

R43 May cause sensitisation by skin contact.

Further Information may be obtained from:-

Loctite Corporation,
Health and Regulatory Affairs - Europe,
Tallaght Business Park,
Whitestown,
Dublin 24,
Ireland.

Tel: +353-1-4046444.

Fax: +353-1-4510806.

Prepared by:

LOCTITELoctite Corporation

SAFETY DATA SHEET

3475B

210260 6.00 IE EA 22.11.2002 MSDS_IE

Environmental Health & Safety Affairs Health & Regulatory Affairs - Europe

Component Name

Dr. Sandra Wade Senior HRA Specialist Health & Regulatory Affairs - Europe R Phrases

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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.



Loctite Corporation

Environmental Health & Safety Affairs Health & Regulatory Affairs - Europe

Metal Set Syringe Part A 301175 4.00 IE EA 27.03.1998 MSDS_IE

Xn

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

301175 **Product Code**

Metal Set Syringe Part A **Trade Name** Henkel Loctite Adhesives Ltd. Manufacturer/Supplier

Watchmead. **Address**

Welwyn Garden City,

Herts., AL7IJB.

UK

01 707 358800 **Phone Number** 01 707 358900 **Fax Number**

+353-1-4599301/+353-87-2629625/+353-1-4046444 **Emergency Phone Number**

2. **COMPOSITION / INFORMATION ON INGREDIENTS**

Epoxy resin. Nature

Hazardous Components in Product for EC

Component Name CAS / EINEC Concentration **R Phrases** Classification

Epoxy resin 25068-38-6 30.00 - 60.00 R36/38, R43 Inorganic filler 10.00 - 30.00 R20/21/22

Silica. Fumed 0.10 - 1.00

3. HAZARD IDENTIFICATION

Irritating to eyes and skin. May cause sensitisation by skin contact.

FIRST AID MEASURES 4.

First Aid - Inhalation

Should not be a problem as product is of low volatility. However, if feeling unwell remove patient to fresh air.

First Aid - Skin

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

First Aid - Eyes

Flush eyes with plenty of water for at least 15 minutes. If irritation persists seek medical attention.

First Aid - Ingestion

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

5. FIRE FIGHTING MEASURES

Non flammable product (flash point is greater than 100°C (CC)). If product is involved in fire extinguish with dry powder, foam or carbon dioxide.

ACCIDENTAL RELEASE MEASURES

For small spills wipe up with paper towel and place in container for disposal. For large spills absorb onto inert absorbent material and place in sealed container for disposal.

7. HANDLING AND STORAGE

Handling

Avoid contact with skin and eyes.



Loctite Corporation

Environmental Health & Safety Affairs Health & Regulatory Affairs - Europe

Metal Set Syringe Part A 301175 4.00 IE EA 27.03.1998 MSDS_IE

7. HANDLING AND STORAGE

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.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

In circumstances where there is a potential for prolonged or repeated skin contact, the use of disposable gloves (polyethylene, natural rubber or equivalent ester-resistant material) is recommended. Good industrial hygiene practices should be observed.

N/A

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State
Colour
White.
Odour
Paint
Ph
N/A
Boiling Range/Point (°C)
Flash Point (CC) (°C)

Paste.
N/A
N/A
> 200

Specific Gravity 1.2g/ml at 20 °C.

Solubility in Water (kg/m³) Immiscible.

Solubility in Acetone Partially miscible

Vapour Pressure (mmHg

@25°C)

Explosion Limits (%)

10. STABILITY AND REACTIVITY

The product is relatively stable under normal conditions of use.

11. TOXICOLOGICAL INFORMATION

Inhalation

Due to the low volatility of the product there are no hazards associated with inhalation under normal conditions of use.

Skin

It is irritating and sensitising to the skin.

Eves

This product is an irritant to the eyes.

Ingestion

This product is considered to be of low toxicity having an acute oral LD50 (rat) >5000mg/kg by analogy to other similar products.

12. ECOLOGICAL INFORMATION

No information available.

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with local and national regulations. Incineration under controlled conditions recommended.



SAFETY DATA SHEET **Loctite Corporation**

Environmental Health & Safety Affairs Health & Regulatory Affairs - Europe

Metal Set Syringe Part A 301175 4.00 IE EA 27.03.1998 MSDS_IE

14. TRANSPORT INFORMATION

None **UN Number**

Not classified. Air (IATA) Not classified. Sea (IMO) Not classified. Road (ADR)/Rail (RID)

15. REGULATORY INFORMATION

Contains

Contains epoxy constituents. See information supplied by

the manufacturer.

Labelling Information



Irritant

R36/38 Irritating to eyes and skin. R43 May cause R phrases

sensitisation by skin contact.

S26 In case of contact with eyes, rinse immediately with S phrases

plenty of water and seek medical advice.

S28 After contact with skin, wash immediately with plenty

of

soap and water.

S24 Avoid contact with skin. S37 Wear suitable gloves.

N/A **Voluntary Labelling**

16. OTHER INFORMATION

MSDS data revised

27 March 1998

Hazardous Components in Product for EC

Component Name R Phrases Epoxy resin R36/38, R43 Inorganic filler R20/21/22

Silica, Fumed

R20/21/22 R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R36/38 R36/38 Irritating to eyes and skin.

R43 R43 May cause sensitisation by skin contact.

Further Information may be obtained from:-

Loctite Corporation,

Health and Regulatory Affairs - Europe,

Tallaght Business Park,

Whitestown, Dublin 24. Ireland.

Tel: +353-1-4046444. Fax: +353-1-4510806.

Prepared by:

Dr. Sandra Wade Senior HRA Specialist

Health & Regulatory Affairs - Europe



Metal Set Syringe Part A 301175 4.00 IE EA 27.03.1998 MSDS_IE

Environmental Health & Safety Affairs Health & Regulatory Affairs - Europe

Component Name

R Phrases

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Loctite Corporation

Environmental Health & Safety Affairs Health & Regulatory Affairs - Europe

Metal Set Syringe Part B 301176 3.00 IE EA 27.03.1998 MSDS_IE

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

Product Code 301176

Trade Name
Metal Set Syringe Part B

Manufacturer/Supplier
Henkel Loctite Adhesives Ltd.

Address Watchmead,

Welwyn Garden City,

Herts., AL7IJB.

UK

Phone Number 01 707 358800 Fax Number 01 707 358900

Emergency Phone Number +353-1-4599301/+353-87-2629625/+353-1-4046444

2. COMPOSITION / INFORMATION ON INGREDIENTS

Nature Hardener for epoxy resin.

Hazardous Components in Product for EC

Component Name CAS / EINEC Concentration R Phrases Classification

 Silica, Fumed
 1.00 - 5.00

 Polymercaptan
 30.00 - 60.00

2,4,6-Tris (Dimethylaminomethyl) phenol 90-72-2 1.00 - 5.00 R22, R36/38

Inorganic Filler 5.00 - 10.00

3. HAZARD IDENTIFICATION

This product is not classified as hazardous.

4. FIRST AID MEASURES

First Aid - Inhalation

Should not be a problem as product is of low volatility. However, if feeling unwell remove patient to fresh air.

First Aid - Skin

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

First Aid - Eyes

Flush eyes with plenty of water for at least 15 minutes. If irritation persists seek medical attention.

First Aid - Ingestion

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

5. FIRE FIGHTING MEASURES

Non flammable product (flash point is greater than 100°C (CC)). If product is involved in fire extinguish with dry powder, foam or carbon dioxide. Trace amounts of toxic fumes may be released on incineration and the use of breathing apparatus is recommended. Self contained breathing apparatus should be worn when dealing with fire.

6. ACCIDENTAL RELEASE MEASURES

For small spills wipe up with paper towel and place in container for disposal. Wash spillage site thoroughly with soap and water or detergent solution.



Loctite Corporation

Environmental Health & Safety Affairs Health & Regulatory Affairs - Europe

Metal Set Syringe Part B 301176 3.00 IE EA 27.03.1998 MSDS_IE

7. HANDLING AND STORAGE

Handling

Avoid contact with skin and eyes.

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.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

In circumstances where there is a potential for prolonged or repeated skin contact, the use of disposable gloves (polyethylene, natural rubber or equivalent ester-resistant material) is recommended. Good industrial hygiene practices should be observed.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State

Colour

Black.

Odour

pH

Boiling Range/Point (°C)

Flash Point (CC) (°C)

Paste.

N/A

N/A

N/A

N/A

Specific Gravity Approx. 1.2g/ml at 20 °C.

N/A

Solubility in Water (kg/m³) Immiscible.

Solubility in Acetone Partially miscible

Vapour Pressure (mmHg

@25°C)

Explosion Limits (%)

10. STABILITY AND REACTIVITY

The product is relatively stable under normal conditions of use.

11. TOXICOLOGICAL INFORMATION

Inhalation

Due to the low volatility of the product there are no hazards associated with inhalation under normal conditions of use.

Skin

This Product is of low toxicity and is not easily absorbed through the skin.

Eyes

Not considered to be an eye irritant.

Ingestion

This product is considered to be of low toxicity having an acute oral LD50 (rat) >5000mg/kg by analogy to other similar products.

12. ECOLOGICAL INFORMATION

No information available.

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with local and national regulations. Incinerate or bury in legal landfill.



Loctite Corporation

Environmental Health & Safety Affairs Health & Regulatory Affairs - Europe

Metal Set Syringe Part B 301176 3.00 IE EA 27.03.1998 MSDS_IE

14. TRANSPORT INFORMATION

UN Number None

Air (IATA)

Sea (IMO)

Road (ADR)/Rail (RID)

Not classified.

Not classified.

Not classified.

15. REGULATORY INFORMATION

Contains N/A

Labelling Information

R phrases
N/A
S phrases
Voluntary Labelling
N/A

16. OTHER INFORMATION

MSDS data revised 27 March 1998

Hazardous Components in Product for EC

Component Name R Phrases

Silica, Fumed Polymercaptan

2,4,6-Tris (Dimethylaminomethyl) phenol

R22, R36/38

Inorganic Filler

R22 R22 Harmful if swallowed. R36/38 R36/38 Irritating to eyes and skin.

Further Information may be obtained from:-

Loctite Corporation, Health and Regulatory Affairs - Europe, Tallaght Business Park, Whitestown, Dublin 24, Ireland.

Tel: +353-1-4046444. Fax: +353-1-4510806.

Prepared by:

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Health & Regulatory Affairs - F

Health & Regulatory Affairs - Europe

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Loctite Corporation

Environmental Health & Safety Affairs Health & Regulatory Affairs - Europe

Metal Set Strip 307336 3.00 IE EA 24.10.2003 MSDS_IE

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

Product Code 307336

Trade Name Metal Set Strip

Manufacturer/Supplier Henkel Loctite Adhesives Ltd.

Address Watchmead,

Welwyn Garden City,

Herts., AL7IJB.

UK

 Phone Number
 01 707 358800

 Fax Number
 01 707 358900

Emergency Phone Number +353-1-4599301/+353-87-2629625/+353-1-4046444

2. COMPOSITION / INFORMATION ON INGREDIENTS

Nature Epoxy resin.

Hazardous Components in Product for EC

Component Name CAS / EINEC Concentration R Phrases Classification

Epoxy Novolac Resin 28064-14-4 5.00 - 20.00 R36/38, R43 Xi Liquid Epoxy resin 25068-38-6 10.00 - 30.00 R36/38, R43, Xi, N

R51/53

3. HAZARD IDENTIFICATION

Irritating to eyes and skin. May cause sensitisation by skin contact. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. FIRST AID MEASURES

First Aid - Inhalation

Remove affected person to fresh air.

First Aid - Skin

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

First Aid - Eyes

Flush eyes with plenty of water for at least 15 minutes. If irritation persists seek medical attention.

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 greater than 100°C (CC)). If product is involved in fire extinguish with dry powder, foam or carbon dioxide. Self contained breathing apparatus should be worn when dealing with fire.

6. ACCIDENTAL RELEASE MEASURES

Wear gloves and eye protection. Scrape up spilled material and place in sealed container for disposal.



Loctite Corporation

Environmental Health & Safety Affairs Health & Regulatory Affairs - Europe

Metal Set Strip 307336 3.00 IE EA 24.10.2003 MSDS_IE

7. HANDLING AND STORAGE

Handling

Avoid contact with skin and eyes.

Storage

Store away from heat in a cool, well-ventilated area. Store away from direct sunlight.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

In circumstances where there is a potential for prolonged or repeated skin contact, the use of disposable gloves (polyethylene, natural rubber or equivalent ester-resistant material) is recommended. Safety glasses should be worn. Good industrial hygiene practices should be observed. Use in well ventilated area.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Putty
Colour Grey.
Odour Mild.

PH Not determined.

Boiling Range/Point (°C) Not determined.

Flash Point (CC) (°C) > 200 Specific Gravity 1.65.

Solubility in Water (kg/m³)

Solubility in Acetone

Vapour Pressure (mmHg

Immiscible.

Not determined.

Not determined.

@25°C)

Explosion Limits (%) Not determined.

10. STABILITY AND REACTIVITY

The product is relatively stable under normal conditions of use. Avoid contact with strong acids, strong bases, strong oxidising agents and strong reducing agents.

11. TOXICOLOGICAL INFORMATION

Inhalation

May cause irritation to respiratory system and mucous membranes if used in confined spaces.

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.

12. ECOLOGICAL INFORMATION

The product should not go into drains or surface water. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with local and national regulations.



Loctite Corporation

Environmental Health & Safety Affairs Health & Regulatory Affairs - Europe

Metal Set Strip 307336 3.00 IE EA 24.10.2003 MSDS_IE

14. TRANSPORT INFORMATION

UN Number None

Air (IATA)

Sea (IMO)

Road (ADR)/Rail (RID)

Not classified.

Not classified.

15. REGULATORY INFORMATION

Contains Contains epoxy constituents. See information supplied by

the manufacturer.

Labelling Information



Irritant

R phrases R36/38 Irritating to eyes and skin.

R43 May cause sensitisation by skin contact.

R52/53 Harmful 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

N/A

soap and water.

S37 Wear suitable gloves.

S61 Avoid release to the environment. Refer to special

instructions/Safety data sheets.

Voluntary Labelling

16. OTHER INFORMATION

MSDS data revised

24 October 2003

Hazardous Components in Product for EC

Component NameR PhrasesEpoxy Novolac ResinR36/38, R43Liquid Epoxy resinR36/38, R43, R51/53

R36/38 R36/38 Irritating to eyes 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.

Further Information may be obtained from:-

Loctite Corporation,

Health and Regulatory Affairs - Europe,

Tallaght Business Park,

Whitestown, Dublin 24, Ireland.

Tel: +353-1-4046444. Fax: +353-1-4510806.

Prepared by:



Metal Set Strip 307336 3.00 IE EA 24.10.2003 MSDS_IE

Environmental Health & Safety Affairs Health & Regulatory Affairs - Europe

Component Name

R Phrases

Dr. Sandra Wade Senior HRA Specialist Health & Regulatory Affairs - Europe

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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.

Supersedes Safety Data Sheet No: 2 dated 20/4/99.