



## Safety Data Sheet according to (EC) No 1907/2006 - ISO 11014-1

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Loctite 3423A- Kit component

sds no. : 204375

V003.0

Revision: 20.05.2010

printing date: 30.03.2011

### 1. Identification of the substance/preparation and of the company/undertaking

**Trade name:**

Loctite 3423A- Kit component

**Intended use:**

Epoxy adhesive

**Company name:**

Henkel Ireland Limited  
Product Safety & Regulatory Affairs  
Tallaght Business Park, Whitestown  
Dublin 24

Ireland

Phone: +353 (14046444)

Fax-no.: +353 (14519926)

**E-mail address of person responsible for Safety Data Sheet:**

ua-productsafety.uk@uk.henkel.com

**Emergency information:**

24 Hours Emergency Tel: +44 (0)1442 278497

### 2. Hazards identification

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.

### 3. Composition / information on ingredients

**General chemical description:**

Epoxy resin

**Declaration of ingredients according to (EC) No 1907/2006:**

Hazardous components CAS-No.	EINECS ELINCS	content	Classification
Bisphenol-A epichlorhydrin resin MW <= 700 25068-38-6	500-033-5	10 - 20 %	R43 Xi - Irritant; R36/38 N - Dangerous for the environment; R51, R53
Epichlorhydrin-sorbitol copolymer 29994-68-1		10 - 20 %	Xi - Irritant; R36, R43 R52/53
RP Bisphenol F-epichlorhydrin resin, MW<=700 28064-14-4		10 - 20 %	Xi - Irritant; R36/38, R43 N - Dangerous for the environment; R51/53
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether 3101-60-8	221-453-2	1 - 10 %	Xi - Irritant; R36/38, R43 R52/53
Oxirane, mono[(C12-14- alkyloxy)methyl] derivates 68609-97-2	271-846-8	1 - 5 %	R43 Xi - Irritant; R38

For full text of the R-Phrases indicated by codes see section 16 'Other Information'.

Substances without classification may have community workplace exposure limits available.

#### 4. First aid measures

**Inhalation:**

Move to fresh air. If symptoms persist, seek medical advice.

**Skin contact:**

Rinse with running water and soap.  
Seek medical advice.

**Eye contact:**

Rinse immediately with plenty of running water (for 10 minutes). Seek medical attention if necessary.

**Ingestion:**

Rinse out mouth, drink 1-2 glasses of water, do not induce vomiting.  
Seek medical advice.

#### 5. Fire fighting measures

**Suitable extinguishing media:**

Carbon dioxide, foam, powder

**Special protection equipment for firefighters:**

Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

**Hazardous combustion products:**

Oxides of carbon, oxides of nitrogen, irritating organic vapors.

#### 6. Accidental release measures

**Personal precautions:**

Avoid skin and eye contact.

**Environmental precautions:**

Do not let product enter drains.

**Clean-up methods:**

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.  
Wash spillage site thoroughly with soap and water or detergent solution.

#### 7. Handling and storage

**Handling:**

Use only in well-ventilated areas.  
Avoid skin and eye contact.  
Prolonged or repeated skin contact should be avoided to minimise any risk of sensitisation.

**Storage:**

Store in a cool, well-ventilated place.

## 8. Exposure controls / personal protection

**Components with specific control parameters for workplace:****Respiratory protection:**

Use only in well-ventilated areas.

**Hand protection:**

Please note that in practice the working life of chemical resistant gloves may be considerably reduced as a result of many influencing factors (e.g. temperature). Suitable risk assessment should be carried out by the end user. If signs of wear and tear are noticed then the gloves should be replaced.

Chemical-resistant protective gloves (EN 374).

Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374):

nitrile rubber (IIR;  $\geq 0.4$  mm thickness)

Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):

nitrile rubber (IIR;  $\geq 0.4$  mm thickness)

This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

**Skin protection:**

Wear suitable protective clothing.

**General protection and hygiene measures:**

Good industrial hygiene practices should be observed.

## 9. Physical and chemical properties

**General characteristics:**

Appearance	Paste
	Grey
Odor:	Mild

**Phys./chem. properties:**

pH-value	6
( )	
Boiling point	200 °C (392 °F)
Flash point	> 200 °C (> 392 °F)
Vapor pressure	0,001 mbar
Density	1,36 g/cm <sup>3</sup>
( )	
Solubility (qualitative)	Insoluble
(Solvent: Water)	
VOC content	< 3,00 % Combined A/B
(2004/42/EC)	

**10. Stability and reactivity****Conditions to avoid:**

Stable under normal conditions of storage and use.

**11. Toxicological information****Oral toxicity:**

May cause irritation to the digestive tract.

**Inhalative toxicity:**

May cause irritation to respiratory system.

**Skin irritation:**

Irritating to the skin.

**Eye irritation:**

Irritating to eyes.

**Sensitizing:**

May cause sensitization by skin contact.

**12. Ecological information****Mobility:**

Cured adhesives are immobile.

**Ecotoxicity:**

Hazardous components CAS-No.	Species	Exposure time	Value type	Value
Bisphenol-A epichlorhydrin resin MW <= 700 25068-38-6	Trout family (Salmonidae)	96 h	LC 50	3,6 mg/l
RP Bisphenol F-epichlorhydrin resin, MW<=700 28064-14-4	Ide, silver or golden orfe (Leuciscus idus)	96 h	LC 50	5,7 mg/l

**General ecological information:**

Do not empty into drains / surface water / ground water.

Toxic to aquatic organisms

May cause long-term adverse effects in the aquatic environment.

**13. Disposal considerations****Product disposal:**

Dispose of in accordance with local and national regulations.

**Waste code( ):**

08 04 09 waste adhesives and sealants containing organic solvents and other dangerous substances

**Disposal of uncleaned packages:**

After use, tubes, cartons and bottles containing residual product should be disposed of as chemically contaminated waste in an authorised legal land fill site or incinerated.

Disposal must be made according to official regulations.

## 14. Transport information

### Road transport ADR:

Class: 9  
Packaging group: III  
Classification code: M6  
Hazard ident. number: 90  
UN no.: 3082  
Label: 9  
Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S. (epoxy resin)  
Tunnelcode: (E)

### Railroad transport RID:

Class: 9  
Packaging group: III  
Classification code: M6  
Hazard ident. number: 90  
UN no.: 3082  
Label: 9  
Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S. (epoxy resin)  
Tunnelcode:

### Inland water transport ADN:

Class: 9  
Packaging group: III  
Classification code: M6  
Hazard ident. number: 90  
UN no.: 3082  
Label: 9  
Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S. (epoxy resin)

### Marine transport IMDG:

Class: 9  
Packaging group: III  
UN no.: 3082  
Label: 9  
EmS: F-A ,S-F  
Seawater pollutant: Marine pollutant  
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S. (epoxy resin)

### Air transport IATA:

Class: 9  
Packaging group: III  
Packaging instructions (passenger): 914  
Packaging instructions (cargo): 914  
UN no.: 3082  
Label: 9  
Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (epoxy resin)

## 15. Regulations - classification and identification

### Indication of danger:

Xi - Irritant

N - Dangerous for the environment



### Contains

Bisphenol-A epichlorhydrin resin MW <= 700,  
RP Bisphenol F-epichlorhydrin resin, MW<=700,  
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether,  
Epichlorhydrin-sorbitol copolymer

### Risk 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.

### Safety 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 water and soap.  
S37 Wear suitable gloves.  
S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

### Additional labeling:

Contains epoxy constituents. See information supplied by the manufacturer.

## 16. Other information

The labelling of the product is indicated in Section 15. The full text of the R-phrases indicated by codes in this safety data sheet are as follows:

R36 Irritating to eyes.

R36/38 Irritating to eyes and skin.

R38 Irritating to skin.

R43 May cause sensitisation by skin contact.

R51 Toxic to aquatic organisms.

R51/53 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.

R53 May cause long-term adverse effects in the aquatic environment.

### Further information:

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

This safety data sheet was prepared in accordance with Council Directive 67/548/EEC and its subsequent amendments, and Commission Directive 1999/45/EC.



## Safety Data Sheet according to (EC) No 1907/2006 - ISO 11014-1

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Loctite 3423B- Kit component

sds no. : 204376

V003.1

Revision: 20.08.2010

printing date: 01.03.2011

### 1. Identification of the substance/preparation and of the company/undertaking

**Trade name:**

Loctite 3423B- Kit component

**Intended use:**

Epoxy Hardener

**Company name:**

Henkel Ireland Limited  
Product Safety & Regulatory Affairs  
Tallaght Business Park, Whitestown  
Dublin 24

Ireland

Phone: +353 (14046444)

Fax-no.: +353 (14519926)

**E-mail address of person responsible for Safety Data Sheet:**

ua-productsafety.uk@uk.henkel.com

**Emergency information:**

24 Hours Emergency Tel: +44 (0)1442 278497

### 2. Hazards identification

R38 Irritating to skin.

R41 Risk of serious damage to eyes.

R43 May cause sensitisation by skin contact.

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

### 3. Composition / information on ingredients

**Declaration of ingredients according to (EC) No 1907/2006:**



Hazardous components CAS-No.	EINECS ELINCS	content	Classification
C36 Fatty acid dimer, tall oil fatty acid, triethylenetetramine polymer 68082-29-1		40 - 50 %	Xi - Irritant; R38, R41
4,4'-Isopropylidenediphenol 80-05-7	201-245-8	1 - < 5 %	Xi - Irritant; R37, R41 R52 R43 Toxic for reproduction - category 3.; R62
2,2'-Iminodi(ethylamine) 111-40-0	203-865-4	1 - 5 %	R43 Xn - Harmful; R21/22 C - Corrosive; R34
2-Piperazin-1-ylethylamine 140-31-8	205-411-0	1 - 5 %	C - Corrosive; R34 R43 Xn - Harmful; R21/22 R52, R53
Triethylenetetramine 112-24-3	203-950-6	1 - 5 %	Xn - Harmful; R21 C - Corrosive; R34 R52, R53 R43
Nonylphenol 25154-52-3	246-672-0	1 - < 5 %	N - Dangerous for the environment; R50, R53 Toxic for reproduction - category 3.; R62, R63 Xn - Harmful; R22 C - Corrosive; R34

For full text of the R-Phrases indicated by codes see section 16 'Other Information'.

Substances without classification may have community workplace exposure limits available.

#### 4. First aid measures

**Inhalation:**

Move to fresh air. If symptoms persist, seek medical advice.

**Skin contact:**

Rinse with running water and soap.  
Seek medical advice.

**Eye contact:**

Rinse immediately with plenty of running water (for 10 minutes). Seek medical attention if necessary.

**Ingestion:**

Rinse out mouth, drink 1-2 glasses of water, do not induce vomiting.  
Seek medical advice.

#### 5. Fire fighting measures

**Suitable extinguishing media:**

Carbon dioxide, foam, powder

**Special protection equipment for firefighters:**

Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

**Hazardous combustion products:**

Oxides of carbon, oxides of nitrogen, irritating organic vapors.

#### 6. Accidental release measures

**Personal precautions:**

Avoid skin and eye contact.

**Environmental precautions:**

Do not let product enter drains.

**Clean-up methods:**

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.  
Wash spillage site thoroughly with soap and water or detergent solution.

**7. Handling and storage****Handling:**

Use only in well-ventilated areas.  
Avoid skin and eye contact.  
Prolonged or repeated skin contact should be avoided to minimise any risk of sensitisation.

**Storage:**

Store in a cool, well-ventilated place.

**8. Exposure controls / personal protection****Components with specific control parameters for workplace:**

Valid for  
Great Britain  
Basis  
UK EH40 WELs

Ingredient	ppm	mg/m3	Type	Category	Remarks
2,2'-IMINODI(ETHYLAMINE) 111-40-0			Skin designation:	Can be absorbed through the skin.	EH40 WEL
2,2'-IMINODI(ETHYLAMINE) 111-40-0	1	4,3	Time Weighted Average (TWA):		EH40 WEL

**Respiratory protection:**

Ensure adequate ventilation.  
Do not inhale vapors and fumes.

**Hand protection:**

Avoid skin-contact.  
Chemical-resistant protective gloves (EN 374).  
Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374):  
nitrile rubber (IIR;  $\geq 0.4$  mm thickness)  
Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):  
nitrile rubber (IIR;  $\geq 0.4$  mm thickness)  
This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

**Eye protection:**

Avoid eye contact.  
Tightly fitting safety goggles

**General protection and hygiene measures:**

Good industrial hygiene practices should be observed.

**9. Physical and chemical properties****General characteristics:**

Appearance: Paste  
beige  
Odor: Amine-like

**Phys./chem. properties:**

Flash point: 124 °C (255.2 °F)  
Vapor pressure: 0,04 mbar  
Density: 1 g/cm<sup>3</sup>  
( )  
Solubility (qualitative): Insoluble  
(Solvent: Water)  
VOC content: < 3,00 % Combined A/B  
(2004/42/EC)

**10. Stability and reactivity****Conditions to avoid:**

Stable under normal conditions of storage and use.

**Materials to avoid:**

Reaction with strong acids.  
Reacts with strong oxidants.

**11. Toxicological information****Oral toxicity:**

May cause irritation to the digestive tract.

**Inhalative toxicity:**

May cause irritation to respiratory system.

**Skin irritation:**

Irritating to the skin.

**Eye irritation:**

Risk of serious damage to eyes

**Sensitizing:**

May cause sensitization by skin contact.

**12. Ecological information****Mobility:**

Cured adhesives are immobile.

**Ecotoxicity:**

Hazardous components CAS-No.	Species	Exposure time	Value type	Value
2-Piperazin-1-ylethylamine 140-31-8 2-Piperazin-1-ylethylamine 140-31-8	Trout family (Salmonidae) Water flea (Daphnia magna)	96 h 48 h	LC 50 EC 50	> 100 mg/l
Triethylenetetramine 112-24-3 Triethylenetetramine 112-24-3	Guppy (Poecilia reticulata) Green algae (Selenastrum capricornutum)	96 h 72 h	LC 50 EC 50	570 mg/l 20 mg/l
Nonylphenol 25154-52-3	Trout family (Salmonidae)	96 h	LC 50	0,23 mg/l

**General ecological information:**

Do not empty into drains / surface water / ground water.  
Toxic to aquatic organisms  
May cause long-term adverse effects in the aquatic environment.

**13. Disposal considerations****Product disposal:**

Dispose of in accordance with local and national regulations.

**Waste code( ):**

08 04 09 waste adhesives and sealants containing organic solvents and other dangerous substances

**Disposal of uncleaned packages:**

After use, tubes, cartons and bottles containing residual product should be disposed of as chemically contaminated waste in an authorised legal land fill site or incinerated.  
Disposal must be made according to official regulations.

**14. Transport information****Road transport ADR:**

Class:	9
Packaging group:	III
Classification code:	M6
Hazard ident. number:	90
UN no.:	3082
Label:	9
Technical name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (dimer fatty acid(C36)poly amido amine resin)
Tunnelcode:	(E)

**Railroad transport RID:**

Class:	9
Packaging group:	III
Classification code:	M6
Hazard ident. number:	90
UN no.:	3082
Label:	9
Technical name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (dimer fatty acid(C36)poly amido amine resin)
Tunnelcode:	

**Inland water transport ADN:**

Class:	9
Packaging group:	III
Classification code:	M6
Hazard ident. number:	
UN no.:	3082
Label:	9
Technical name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (dimer fatty acid(C36)poly amido amine resin)

**Marine transport IMDG:**

Class:	9
Packaging group:	III
UN no.:	3082
Label:	9
EmS:	F-A ,S-F
Seawater pollutant:	Marine pollutant
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (dimer fatty acid(C36)poly amido amine resin)

**Air transport IATA:**

Class:	9
Packaging group:	III
Packaging instructions (passenger)	914
Packaging instructions (cargo)	914
UN no.:	3082
Label:	9
Proper shipping name:	Environmentally hazardous substance, liquid, n.o.s. (dimer fatty acid(C36)poly amido amine resin)

**15. Regulations - classification and identification**

**Indication of danger:**

Xi - Irritant

N - Dangerous for the environment



**Contains**

4,4'-Isopropylidenediphenol,  
2,2'-Iminodi(ethylamine),  
2-Piperazin-1-ylethylamine,  
Triethylenetetramine

**Risk phrases:**

R38 Irritating to skin.  
R41 Risk of serious damage to eyes.  
R43 May cause sensitisation by skin contact.  
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Safety 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 water and soap.  
S37/39 Wear suitable gloves and eye/face protection.  
S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

## 16. Other information

The labelling of the product is indicated in Section 15. The full text of the R-phrases indicated by codes in this safety data sheet are as follows:

- R21 Harmful in contact with skin.
- R21/22 Harmful in contact with skin and if swallowed.
- R22 Harmful if swallowed.
- R34 Causes burns.
- R37 Irritating to respiratory system.
- R38 Irritating to skin.
- R41 Risk of serious damage to eyes.
- R43 May cause sensitisation by skin contact.
- R50 Very toxic to aquatic organisms.
- R52 Harmful to aquatic organisms.
- R53 May cause long-term adverse effects in the aquatic environment.
- R62 Possible risk of impaired fertility.
- R63 Possible risk of harm to the unborn child.

### Further information:

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

This safety data sheet was prepared in accordance with Council Directive 67/548/EEC and its subsequent amendments, and Commission Directive 1999/45/EC.