

**RAYCHEM S1006 ADHESIVE, PART A**

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

**1.1 Identification of the substance or preparation:**

Synonyms: Epoxy resin

CAS no.	: N.A.	Reference	: RAY/3002AE Revision 3
EC index No.	: N.A.	NFPA code	: N.D.
EINECS No.	: N.A.	Molecular weight	: N.A.
RTECS No.	: N.A.	Formula	: N.A.

**1.2 Use of the substance or the preparation:**

Adhesive

**1.3 Company/undertaking identification:**

TYCO Electronics  
Cheney Manor Industrial Estate  
SN2 2QE Swindon, United Kingdom  
Tel. : +44 1793 57 38 24  
Fax : +44 1793 57 39 53

**1.4 Telephone number for emergency:**

+32 14 58 45 45  
Brandweerinformatiecentrum voor gevaarlijke stoffen (B.I.G.)  
Technische Schoolstraat 43A, B-2440 Geel

**2. Composition/information on ingredients**

Hazardous ingredients	CAS No. EINECS No.	Conc. in %	Hazard symbol	Risks (R-phrases)
reaction product: bisphenol A- (epichlorhydrin); epoxy resin (number average molecular weight<=700)	25068-38-6 -	95-100	Xi;N	36/38-43-51/53 (1)

(1) For R-phrases in full: see heading 16

**3. Hazards identification**

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

**4. First aid measures**

**4.1 Eye contact:**

- Hold eyelids apart and flush eyes with clean water for 15 minutes
- Consult a doctor/medical service

**4.2 Skin contact:**

- Remove contaminated clothing and launder before reuse
- Wash skin immediately with mild soap and water
- Consult a doctor/medical service if irritation persists

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## 4.3 After inhalation:

- Remove the victim into fresh air
- Keep warm and at rest
- Trained personnel may administer oxygen if necessary
- Consult a doctor/medical service if breathing problems develop

## 4.4 After ingestion:

- Never give anything by mouth to an unconscious person
- If conscious rinse mouth with water and give 250ml of water to drink
- Do not induce vomiting
- Consult a doctor/medical service

## 5. Fire-fighting measures

### 5.1 Suitable extinguishing media:

- Water spray
- Polyvalent foam
- BC powder
- Carbon dioxide

### 5.2 Unsuitable extinguishing media:

- Solid water jet ineffective as extinguishing medium

### 5.3 Special exposure hazards:

- Hazardous decomposition products may be evolved in a fire (see section 10.3)
- Avoid run-off water entering drains (e.g. use barriers)

### 5.4 Instructions:

- Take account of toxic firefighting water
- Use firefighting water moderately and contain it

### 5.5 Special protective equipment for firefighters:

- Self-contained breathing apparatus with full face piece
- Protective clothing for exposure to chemicals

## 6. Accidental release measures

### 6.1 Personal protection/precautions: see heading 8.1/8.3/10.3

### 6.2 Environmental precautions:

- Prevent soil and water pollution
- Substance must not be discharged into the sewer
- Contain leaking substance, pump over in suitable containers
- Plug the leak, cut off the supply
- Dam up the liquid spill

### 6.3 Methods for cleaning up:

- Take up liquid spill into inert absorbent material
- Scoop absorbed substance into closing containers
- Carefully collect the spill/leftovers
- Clean contaminated surfaces with a soap solution
- Wash clothing and equipment after handling

## 7. Handling and storage

### 7.1 Handling:

- Observe very strict hygiene - avoid contact
- Avoid contact with skin and eyes
- Avoid inhaling vapours/fumes which may be released during use
- Avoid inhaling dust when grinding/sanding/cutting cured material
  
- Do not eat, drink or smoke in the work area
- Wash hands after handling material
- Do not discharge the waste into the drain
- Remove contaminated clothing immediately
- Clean contaminated clothing

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## 7.2 Storage:

- Keep container tightly closed
- Store in a cool area
- Store in a dry area
- Store in a well-ventilated area
- Keep away from: oxidizing agents, acids, amines

Storage temperature	: 23	°C
Quantity limits	: N.D.	kg
Storage life	: 365	days
Materials for packaging	:	
- suitable	:no data available	
- to avoid	:no data available	

## 7.3 Specific uses:

- Refer to Tyco Electronics installation instructions
- The curing process is exothermic (releases heat)

## 8. Exposure controls/Personal protection

### 8.1 Exposure limit values:

TLV-TWA	: not listed
TLV-STEL	: not listed
TLV-Ceiling	: not listed
OES-LTEL	: not listed
OES-STEL	: not listed
MEL-LTEL	: not listed
MEL-STEL	: not listed
MAK	: not listed
TRK	: not listed
MAC-TGG 8 h	: not listed
MAC-TGG 15 min.	: not listed
MAC-Ceiling	: not listed
VME-8 h	: not listed
VLE-15 min.	: not listed
GWBB-8 h	: not listed
GWK-15 min.	: not listed
Momentary value	: not listed
EC	: not listed
EC-STEL	: not listed

#### Sampling methods:

- No data available

### 8.2 Exposure controls:

#### 8.2.1 Occupational exposure controls:

- Use general and/or local exhaust ventilation of the workplace
- Curing ovens must be exhausted to outdoors or to suitable emission control device
- Use local exhaust ventilation when grinding/sanding/cutting cured material

#### 8.2.2 Environmental exposure controls: see heading 13

### 8.3 Personal protection:

#### 8.3.1 respiratory protection:

- Not required for normal conditions of use
- If ventilation is inadequate to control exposure during use, a suitable respirator or air-supplied equipment should be worn

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## 8.3.2 hand protection:

- Impervious gloves  
Suitable materials: Butyl rubber  
Nitrile rubber
- Breakthrough time: N.D.

## 8.3.3 eye protection:

- Safety glasses with side shields or goggles

## 8.3.4 skin protection:

- Protective clothing  
Suitable materials: Butyl rubber  
Nitrile rubber

## 9. Physical and chemical properties

### 9.1 General information:

Appearance (at 20°C) : Viscous liquid  
Odour : Odourless  
Colour : Light yellow

### 9.2 Important health, safety and environmental information:

pH value : N.D.  
Boiling point/boiling range : > 200 °C  
Flashpoint : > 200 °C  
Explosion limits : N.D. vol% ( °C)  
Vapour pressure (at 20°C) : < 0.0004 hPa  
Vapour pressure (at 50°C) : N.D. hPa  
Relative density (at 20°C) : 1.17  
Water solubility : Insoluble  
Soluble in : N.D.  
Relative vapour density : N.D.  
Viscosity : N.D. Pa.s  
Partition coefficient n-octanol/water : > 3  
Evaporation rate :  
    ratio to butyl acetate : N.D.  
    ratio to ether : N.D.  
Decomposition temperature : > 200 °C

### 9.3 Other information:

Melting point/melting range : N.D. °C  
Auto-ignition point : > 400 °C  
Saturation concentration : N.D. g/m<sup>3</sup>

## 10. Stability and reactivity

### 10.1 Conditions to avoid/reactivity:

- Stable under normal conditions

### 10.2 Materials to avoid:

- Keep away from: oxidizing agents, acids, amines

### 10.3 Hazardous decomposition products:

- May react exothermically with amines and mercaptans
- Thermal decomposition and combustion products may include, but are not limited to carbon monoxide, carbon dioxide and harmful gases/vapours

## 11. Toxicological information

### 11.1 Acute toxicity:

LD50 oral rat	: > 5000	mg/kg
LD50 dermal rat	: N.D.	mg/kg
LD50 dermal rabbit	: N.D.	mg/kg
LC50 inhalation rat	: N.D.	mg/l/4 h
LC50 inhalation rat	: N.D.	ppm/4 h

### 11.2 Chronic toxicity:

EC carc. cat.	: not listed
EC muta. cat.	: not listed
EC repr. cat.	: not listed
Carcinogenicity (TLV)	: not listed
Carcinogenicity (MAC)	: not listed
Carcinogenicity (VME)	: not listed
Carcinogenicity (GWBB)	: not listed
Carcinogenicity (MAK)	: not listed
Mutagenicity (MAK)	: not listed
Teratogenicity (MAK)	: not listed
IARC classification	: not listed

11.3 Routes of exposure: Skin and eye contact and if swallowed  
Inhalation of thermal decomposition products

### 11.4 Acute effects/symptoms:

- **AFTER INHALATION**
  - Not a normal route of exposure
  - Vapours evolved during heat curing processes, and dust formed when grinding/sanding/cutting cured material, can cause irritation of the respiratory tract
  - Symptoms may include sore nose and throat, coughing, sneezing and breathing difficulties
- **AFTER INGESTION**
  - Not expected to cause adverse health effects if small amounts are swallowed incidental to normal handling
  - May cause irritation of the gastric/intestinal mucosa
  - Symptoms may include pain, nausea, vomiting, abdominal tenderness and blood in vomit/faeces
- **AFTER SKIN CONTACT**
  - Prolonged or repeated exposure may cause skin irritation and dermatitis
  - Symptoms may include redness, swelling and itching
- **AFTER EYE CONTACT**
  - Symptoms may include pain, lacrimation, redness of the eye tissue, swelling and blurred vision

### 11.5 Chronic effects:

- May cause sensitization by skin contact
- If skin sensitization has developed and a causal relationship has been established, further exposure should not be allowed
- **ON CONTINUOUS/REPEATED EXPOSURE/CONTACT:**
  - Swelling of the skin
  - Skin rash/inflammation

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## 12. Ecological information

### 12.1 Ecotoxicity:

reaction product: bisphenol A-(epichlorhydrin); epoxy resin (number average molecular weight<=700):

- LC50 (96 h) : 1.5/7.7 mg/l (SALMO GAIARDNERI/ONCORHYNCHUS MYKISS)
- EC50 (24 h) : 1.1/3.6 mg/l (DAPHNIA MAGNA)
- EC50 (96 h) : 220 mg/l (CHLOROPHYTA)

### 12.2 Mobility:

- Volatile organic compounds (VOC): N.D. %
- Insoluble in water

For other physicochemical properties see heading 9.

### 12.3 Persistence and degradability:

- biodegradation BOD<sub>5</sub> : N.D. % ThOD
- water : - Not readily biodegradable in water  
- test: BOD 28d. % THOD
- soil : T ½: N.D. days

### 12.4 Bioaccumulative potential:

- log P<sub>ow</sub> : > 3
- BCF : N.D.
- Bioaccumulative

### 12.5 Other adverse effects:

- WGK : 2 (Classification based on the components in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 17 May 1999)
- Effect on the ozone layer : Not dangerous for the ozone layer (1999/45/EC)
- Greenhouse effect : no data available
- Effect on waste water purification : no data available

## 13. Disposal considerations

### 13.1 Provisions relating to waste:

- Waste material code (91/689/EEC, Council Decision 2001/118/EC, O.J. L47 of 16/2/2001): 08 04 09 (waste adhesives and sealants containing organic solvents or other dangerous substances)
- Waste material code (Flanders): 512, 559
- Hazardous waste (91/689/EEC)
- Not classified as hazardous waste when mixed with S1006 Part B and fully cured

### 13.2 Disposal methods:

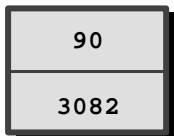
- Recycle/reuse
- Landfill or incinerate at a licensed site in accordance with national and local regulations
- Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber
- Do not discharge into drains or the environment
- If this occurs, inform the local authority immediately

### 13.3 Packaging/Container:

- Waste material code packaging (91/689/EEC, Council Decision 2001/118/EC, O.J. L47 of 16/2/2001): 15 01 10 (packaging containing residues of or contaminated by dangerous substances)

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## 14. Transport information



- 14.1 Classification of the substance in compliance with UN Recommendations
- |                      |   |
|----------------------|---|
| UN number            | : 3082  |
| CLASS                | : 9   |
| SUB RISKS            | : -   |
| PACKING              | : III   |
| PROPER SHIPPING NAME | : UN 3082, Environmentally hazardous substance, liquid, n.o.s. (reaction product: bisphenol A-(epichlorhydrin); epoxy resin (number average molecular weight<=700)) |
- 14.2 ADR (transport by road)
- |                       |       |
|-----------------------|-------|
| CLASS                 | : 9   |
| PACKING               | : III |
| DANGER LABEL TANKS    | : 9   |
| DANGER LABEL PACKAGES | : 9   |
- 14.3 RID (transport by rail)
- |                       |       |
|-----------------------|-------|
| CLASS                 | : 9   |
| PACKING               | : III |
| DANGER LABEL TANKS    | : 9   |
| DANGER LABEL PACKAGES | : 9   |
- 14.4 ADNR (transport by inland waterways)
- |                       |       |
|-----------------------|-------|
| CLASS                 | : 9   |
| PACKING               | : III |
| DANGER LABEL TANKS    | : 9   |
| DANGER LABEL PACKAGES | : 9   |
- 14.5 IMDG (maritime transport)
- |                  |       |
|------------------|-------|
| CLASS            | : 9   |
| SUB RISKS        | : -   |
| PACKING          | : III |
| MFAG             | : -   |
| EMS              | : -   |
| MARINE POLLUTANT | : P   |
- 14.6 ICAO (air transport)
- |   |            |
|---|------------|
| CLASS                                   | : 9        |
| SUB RISKS                               | : -        |
| PACKING                                 | : III      |
| PACKING INSTRUCTIONS PASSENGER AIRCRAFT | : 914/Y914 |
| PACKING INSTRUCTIONS CARGO AIRCRAFT     | : 914      |
- 14.7 Special precautions in connection with transport : none
- 14.8 Limited quantities (LQ) :

When substances and their packaging meet the conditions established by ADR/RID/ADNR in chapter 3.4, **only** the following prescriptions shall be complied with:  
each package shall display a diamond-shaped figure with the following inscription:  
- 'UN 3082'  
or, in the case of different goods with different identification numbers within a single package:  
- the letters 'LQ'

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## 15. Regulatory information

Classification according to directives 67/548/EEC and 1999/45/EC (\*\*: see heading 16)



Irritant



Dangerous for the environment

Contains reaction product: bisphenol A-(epichlorhydrin); epoxy resin (number average molecular weight<=700). See information supplied by the manufacturer.

- R36/38 : Irritating to eyes and skin  
R43 : May cause sensitization by skin contact  
R51/53 : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
- S24 : Avoid contact with skin  
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

Users are advised that they may have additional disclosure obligations under other national and local laws. Users are advised to ensure that this information is brought to the attention of all employees, agents, and contractors handling this product. Users of Tyco Electronics products should make their own evaluation to determine the suitability of each such product for the specific application and to establish safe handling and installation procedures. Distributors of this product are advised to forward this document, or the information contained herein, to every purchaser of this product.

Tyco Electronics makes no warranties as to the accuracy or completeness of this information and disclaims any liability in connection with its use. Tyco Electronics obligations shall be only as set forth in Tyco Electronics standard terms and conditions of sale for this product. In no case will Tyco Electronics be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of this product.

**N.A.** = NOT APPLICABLE  
**N.D.** = NOT DETERMINED  
**\*** = INTERNAL CLASSIFICATION

### (\*\*) Labelling:

The labelling of the substance described in this MSDS complies with the provisions of Directive 1999/45/EC of 31 May 2001, published in the Official Journal of the European Communities L 200 of 30/07/1999. This Directive replaces Directive 88/379/EEC of 7 June 1988, published in the Official Journal of the European Communities L 187 of 16/07/1988.

Member States shall apply the laws, regulations and administrative provisions referred to in article 22 of this Directive:

- (a) to preparations not within the scope of Directive 91/414/EEC or Directive 98/8/EC as from 30 July 2002; and  
(b) to preparations within the scope of Directive 91/414/EEC or Directive 98/8/EC as from 30 July 2004.

### Full text of any R-phrases referred to under heading 2:

- R36/38 : Irritating to eyes and skin  
R43 : May cause sensitization by skin contact  
R51/53 : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment



# RAYCHEM S1006 ADHESIVE,PART A

## Exposure limits:

**TLV** : Threshold Limit Value - ACGIH USA 2002  
**OES** : Occupational Exposure Standards - United Kingdom 1999  
**MEL** : Maximum Exposure Limits - United Kingdom 1999  
**MAK** : Maximale Arbeitsplatzkonzentrationen - Germany 2001  
**TRK** : Technische Richtkonzentrationen - Germany 2001  
**MAC** : Maximale aanvaarde concentratie - The Netherlands 2002  
**VME** : Valeurs limites de Moyenne d'Exposition - France 1999  
**VLE** : Valeurs limites d'Exposition à court terme - France 1999  
**GWBB** : Grenswaarde beroepsmatige blootstelling - Belgium 2002  
**GWK** : Grenswaarde kortstondige blootstelling - Belgium 2002  
**EC** : Indicative occupational exposure limit values - directive 2000/39/EC

**RAYCHEM S1006 ADHESIVE PART B**

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

**1.1 Identification of the substance or preparation:**

Synonyms: Aminopolyamide resin

CAS no.	: N.A.	Reference	: RAY/3002BE Revision 3
EC index No.	: N.A.	NFPA code	: N.D.
EINECS No.	: N.A.	Molecular weight	: N.A.
RTECS No.	: N.A.	Formula	: N.A.

**1.2 Use of the substance or the preparation:**

Adhesive

**1.3 Company/undertaking identification:**

TYCO Electronics  
Cheney Manor Industrial Estate  
SN2 2QE Swindon, United Kingdom  
Tel. : +44 1793 57 38 24  
Fax : +44 1793 57 39 53

**1.4 Telephone number for emergency:**

+32 14 58 45 45  
Brandweerinformatiecentrum voor gevaarlijke stoffen (B.I.G.)  
Technische Schoolstraat 43A, B-2440 Geel

**2. Composition/information on ingredients**

Hazardous ingredients	CAS No. EINECS No.	Conc. in %	Hazard symbol	Risks (R-phrases)
polyaminoamide	68410-23-1 -	> 89	Xi	41 (1)
triethylenetetramine	112-24-3 203-950-6	<10	C	21-34-43-52/53 (1)

(1) For R-phrases in full: see heading 16

**3. Hazards identification**

- Irritating to skin
- Risk of serious damage to eyes
- May cause sensitization by skin contact

**4. First aid measures**

**4.1 Eye contact:**

- Hold eyelids apart and flush eyes with clean water for 15 minutes
- Consult a doctor/medical service

**4.2 Skin contact:**

- Remove contaminated clothing and launder before reuse
- Wash skin immediately with mild soap and water
- Consult a doctor/medical service if irritation persists

**4.3 After inhalation:**

- Remove the victim into fresh air
- Keep warm and at rest
- Trained personnel may administer oxygen if necessary
- Consult a doctor/medical service if breathing problems develop

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Compiled by : Brandweerinformatiecentrum voor Gevaarlijke Stoffen vzw (BIG)  
Technische Schoolstraat 43 A, B-2440 Geel  
☎ +32 14 58 45 47 http://www.big.be E-mail: info@big.be

MSDS established : 26-07-1999 Revision date : 13-09-2002  
Reference number : BIG\28650GB Revision number : 003  
Reason for revision : Directive 2001/58/EC

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## 4.4 After ingestion:

- Never give anything by mouth to an unconscious person
- Do not induce vomiting
- If conscious rinse mouth with water and give sips of water to drink
- Give fruit juice to drink for neutralisation
- Consult a doctor/medical service

## 5. Fire-fighting measures

### 5.1 Suitable extinguishing media:

- Water spray
- Polyvalent foam
- BC powder
- Carbon dioxide

### 5.2 Unsuitable extinguishing media:

- Solid water jet ineffective as extinguishing medium

### 5.3 Special exposure hazards:

- Hazardous decomposition products may be evolved in a fire (see section 10.3)
- Avoid run-off water entering drains (e.g. use barriers)

### 5.4 Instructions:

- Dilute toxic gases with water spray
- Take account of toxic firefighting water
- Use firefighting water moderately and contain it

### 5.5 Special protective equipment for firefighters:

- Self-contained breathing apparatus with full face piece
- Protective clothing for exposure to chemicals

## 6. Accidental release measures

### 6.1 Personal protection/precautions: see heading 8.1/8.3/10.3

### 6.2 Environmental precautions:

- Prevent soil and water pollution
- Substance must not be discharged into the sewer
- Contain leaking substance, pump over in suitable containers
- Plug the leak, cut off the supply
- Dam up the liquid spill

### 6.3 Methods for cleaning up:

- Take up liquid spill into inert absorbent material
- Scoop absorbed substance into closing containers
- Carefully collect the spill/leftovers
- Clean contaminated surfaces with a soap solution
- Wash clothing and equipment after handling

## 7. Handling and storage

### 7.1 Handling:

- Observe very strict hygiene - avoid contact
- Avoid contact with skin and eyes
- Ensure adequate ventilation of the workplace
- Avoid inhaling vapours/fumes which may be released during use
- Avoid inhaling dust when grinding/sanding/cutting cured material
  
- Do not eat, drink or smoke in the work area
- Wash hands after handling material
  
- Do not discharge the waste into the drain
- Remove contaminated clothing immediately
- Clean contaminated clothing

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## 7.2 Storage:

- Keep container tightly closed
- Store in a cool area
- Store in a dry area
- Store in a well-ventilated area
- Keep away from: heat sources, acids

Storage temperature : 23 °C  
Quantity limits : N.D. kg  
Storage life : 365 days  
Materials for packaging :  
- suitable :no data available  
  
- to avoid :no data available

## 7.3 Specific uses:

- Refer to Tyco electronics product installation instructions
- The curing process is exothermic (releases heat)

## 8. Exposure controls/Personal protection

TLV-TWA : not listed  
TLV-STEL : not listed  
TLV-Ceiling : not listed  
  
OES-LTEL : not listed  
OES-STEL : not listed  
MEL-LTEL : not listed  
MEL-STEL : not listed  
  
MAK : not listed  
TRK : not listed  
  
MAC-TGG 8 h : not listed  
MAC-TGG 15 min. : not listed  
MAC-Ceiling : not listed  
  
VME-8 h : not listed  
VLE-15 min. : not listed  
  
GWBB-8 h : not listed  
GWK-15 min. : not listed  
Momentary value : not listed  
  
EC : not listed  
EC-STEL : not listed

### 8.1 Exposure limit values:

#### Sampling methods:

- Triethylene Tetramine (Ethylenediamine) NIOSH 2540
- Triethylene Tetramine OSHA 60

### 8.2 Exposure controls:

#### 8.2.1 Occupational exposure controls:

- Measure the concentration in the air regularly
- Use general and/or local exhaust ventilation of the workplace
- Curing ovens must be exhausted to outdoors or to suitable emission control device
- Use local exhaust ventilation when grinding/sanding/cutting cured material

#### 8.2.2 Environmental exposure controls: see heading 13

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## 8.3 Personal protection:

### 8.3.1 respiratory protection:

- Not required for normal conditions of use
- If ventilation is inadequate to control exposure during use, a suitable respirator or air-supplied equipment should be worn

### 8.3.2 hand protection:

- Impervious gloves  
Suitable materials: PVC  
Rubber
- Breakthrough time: N.D.

### 8.3.3 eye protection:

- Safety glasses with side shields or goggles

### 8.3.4 skin protection:

- Protective clothing  
Suitable materials: PVC  
Rubber

## 9. Physical and chemical properties

### 9.1 General information:

Appearance (at 20°C) : Liquid  
Odour : Amine  
Colour : Amber

### 9.2 Important health, safety and environmental information:

pH value : 11 (50 %)  
Boiling point/boiling range : > 200 °C  
Flashpoint : > 200 °C  
Explosion limits : N.D. vol% ( °C)  
Vapour pressure (at 20°C) : < 0.1 hPa  
Vapour pressure (at 50°C) : N.D. hPa  
Relative density (at 20°C) : 0.96  
Water solubility : Insoluble  
Soluble in : N.D.  
Relative vapour density : N.D.  
Viscosity : N.D. Pa.s  
Partition coefficient n-octanol/water : N.D.  
Evaporation rate :  
ratio to butyl acetate : N.D.  
ratio to ether : N.D.  
Decomposition temperature : > 250 °C

### 9.3 Other information:

Melting point/melting range : N.D. °C  
Auto-ignition point : N.D. °C  
Saturation concentration : N.D. g/m<sup>3</sup>

## 10. Stability and reactivity

### 10.1 Conditions to avoid/reactivity:

- Stable under normal conditions

### 10.2 Materials to avoid:

- Keep away from: heat sources, acids

### 10.3 Hazardous decomposition products:

- May react exothermically with epoxy resins
- Thermal decomposition and combustion products may include, but are not limited to: carbon monoxide, carbon dioxide, oxides of nitrogen and other harmful gases/vapours

## 11. Toxicological information

### 11.1 Acute toxicity:

LD50 oral rat	: > 15000	mg/kg
LD50 dermal rat	: N.D.	mg/kg
LD50 dermal rabbit	: N.D.	mg/kg
LC50 inhalation rat	: N.D.	mg/l/4 h
LC50 inhalation rat	: N.D.	ppm/4 h

### 11.2 Chronic toxicity:

EC carc. cat.	: not listed
EC muta. cat.	: not listed
EC repr. cat.	: not listed

Carcinogenicity (TLV)	: not listed
Carcinogenicity (MAC)	: not listed
Carcinogenicity (VME)	: not listed
Carcinogenicity (GWBB)	: not listed

Carcinogenicity (MAK)	: not listed
Mutagenicity (MAK)	: not listed
Teratogenicity (MAK)	: not listed

IARC classification	: not listed
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11.3 Routes of exposure: Skin and eye contact and if swallowed  
Inhalation of thermal decomposition products

### 11.4 Acute effects/symptoms:

- **AFTER INHALATION**
  - Not a normal route of exposure
  - Vapours evolved during heat curing processes, and dust formed when grinding/sanding/cutting cured material, can cause irritation of the respiratory tract
  - Symptoms may include sore nose and throat, coughing, sneezing and breathing difficulties
- **AFTER INGESTION**
  - Not expected to cause adverse health effects if small amounts are swallowed incidental to normal handling
  - May cause irritation of the gastric/intestinal mucosa
  - Symptoms may include pain, nausea, vomiting, abdominal tenderness and blood in vomit/faeces
- **AFTER SKIN CONTACT**
  - May cause skin irritation and dermatitis
  - Symptoms may include redness, swelling and itching
- **AFTER EYE CONTACT**
  - Symptoms may include pain, redness and watering of the eyes, swelling and blurred vision
  - Risk of serious damage to the eyes

### 11.5 Chronic effects:

- May cause sensitization by skin contact
- If skin sensitization has developed and a causal relationship has been established, further exposure should not be allowed
- **ON CONTINUOUS/REPEATED EXPOSURE/CONTACT:**
  - Skin rash/inflammation

# RAYCHEM S1006 ADHESIVE PART B

## 12. Ecological information

### 12.1 Ecotoxicity:

- No data available

### 12.2 Mobility:

- Volatile organic compounds (VOC): N.D.%
- Insoluble in water

For other physicochemical properties see heading 9.

### 12.3 Persistence and degradability:

- biodegradation BOD<sub>5</sub> : N.D. % ThOD
- water : Not readily degradable in water
- soil : T ½: N.D. days

### 12.4 Bioaccumulative potential:

- log P<sub>ow</sub> : N.D.
- BCF : N.D.

### 12.5 Other adverse effects:

- WGK : 2 (internal company classification)
- Effect on the ozone layer : Not dangerous for the ozone layer (1999/45/EC)
- Greenhouse effect : no data available
- Effect on waste water purification : no data available

## 13. Disposal considerations

### 13.1 Provisions relating to waste:

- Waste material code (91/689/EEC, Council Decision 2001/118/EC, O.J. L47 of 16/2/2001): 08 04 09 (waste adhesives and sealants containing organic solvents or other dangerous substances)
- Hazardous waste (91/689/EEC)
- Not classified as hazardous waste when mixed with S1006 Part A and fully cured

### 13.2 Disposal methods:

- Landfill or incinerate at a licensed site in accordance with national and local regulations
- Dissolve or mix with a combustible solvent
- Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber
- Do not discharge into the sewer

### 13.3 Packaging/Container:

- Waste material code packaging (91/689/EEC, Council Decision 2001/118/EC, O.J. L47 of 16/2/2001): 15 01 10 (packaging containing residues of or contaminated by dangerous substances)

# RAYCHEM S1006 ADHESIVE PART B

## 14. Transport information

- 14.1 Classification of the substance in compliance with UN Recommendations  
UN number :  
CLASS :  
SUB RISKS :  
PACKING :  
PROPER SHIPPING NAME :
- 14.2 ADR (transport by road)  
CLASS : NOT SUBJECT  
PACKING :  
DANGER LABEL TANKS :  
DANGER LABEL PACKAGES :
- 14.3 RID (transport by rail)  
CLASS :  
PACKING :  
DANGER LABEL TANKS :  
DANGER LABEL PACKAGES :
- 14.4 ADN (transport by inland waterways)  
CLASS : NOT SUBJECT  
PACKING :  
DANGER LABEL TANKS :  
DANGER LABEL PACKAGES :
- 14.5 IMDG (maritime transport)  
CLASS : NOT SUBJECT  
SUB RISKS :  
PACKING :  
MFAG :  
EMS :  
MARINE POLLUTANT :
- 14.6 ICAO (air transport)  
CLASS : NOT SUBJECT  
SUB RISKS :  
PACKING :  
PACKING INSTRUCTIONS PASSENGER AIRCRAFT :  
PACKING INSTRUCTIONS CARGO AIRCRAFT :
- 14.7 Special precautions in connection with transport : not restricted for any mode of international transport



# RAYCHEM S1006 ADHESIVE PART B

## 15. Regulatory information

Classification according to directives 67/548/EEC and 1999/45/EC (\*\*: see heading 16)



Irritant

contains: triethylenetetramine

R38 : Irritating to skin  
R41 : Risk of serious damage to eyes  
R43 : May cause sensitization by skin contact

S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice  
S36/37/39 : Wear suitable protective clothing gloves, and eye/face protection

## 16. Other information

Users are advised that they may have additional disclosure obligations under other national and local laws. Users are advised to ensure that this information is brought to the attention of all employees, agents, and contractors handling this product. Users of Tyco Electronics products should make their own evaluation to determine the suitability of each such product for the specific application and to establish safe handling and installation procedures. Distributors of this product are advised to forward this document, or the information contained herein, to every purchaser of this product.

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**N.A.** = NOT APPLICABLE  
**N.D.** = NOT DETERMINED  
**\*** = INTERNAL CLASSIFICATION

### (\*\*) Labelling:

The labelling of the substance described in this MSDS complies with the provisions of Directive 1999/45/EC of 31 May 2001, published in the Official Journal of the European Communities L 200 of 30/07/1999. This Directive replaces Directive 88/379/EEC of 7 June 1988, published in the Official Journal of the European Communities L 187 of 16/07/1988.

Member States shall apply the laws, regulations and administrative provisions referred to in article 22 of this Directive:

- (a) to preparations not within the scope of Directive 91/414/EEC or Directive 98/8/EC as from 30 July 2002; and
- (b) to preparations within the scope of Directive 91/414/EEC or Directive 98/8/EC as from 30 July 2004.

### Full text of any R-phrases referred to under heading 2:

R21 : Harmful in contact with skin  
R34 : Causes burns  
R41 : Risk of serious damage to eyes  
R43 : May cause sensitization by skin contact  
R52/53 : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

## RAYCHEM S1006 ADHESIVE PART B

### Exposure limits:

**TLV** : Threshold Limit Value - ACGIH USA 2002  
**OES** : Occupational Exposure Standards - United Kingdom 1999  
**MEL** : Maximum Exposure Limits - United Kingdom 1999  
**MAK** : Maximale Arbeitsplatzkonzentrationen - Germany 2001  
**TRK** : Technische Richtkonzentrationen - Germany 2001  
**MAC** : Maximale aanvaarde concentratie - The Netherlands 2002  
**VME** : Valeurs limites de Moyenne d'Exposition - France 1999  
**VLE** : Valeurs limites d'Exposition à court terme - France 1999  
**GWBB** : Grenswaarde beroepsmatige blootstelling - Belgium 2002  
**GWK** : Grenswaarde kortstondige blootstelling - Belgium 2002  
**EC** : Indicative occupational exposure limit values - directive 2000/39/EC