

## Safety Data Sheet 0118-2 Part A

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

PRODUCT NAME ; 0118-2 Part A

ADDRESS/TEL. No ;	EUROPOL 9 BIRCHILLS TRADING ESTATE EMERY ROAD BRISLINGTON, BRISTOL BS4 5PF
europoluk.com	
00(44)117 9715 500	
Emergency number 00(44)117 9715 500	

### 2 COMPOSITION/INFORMATION ON INGREDIENTS

#### 2.1 CLASSIFICATION OF THE SUBSTANCE

MAIN HAZARDS ; NO SIGNIFICANT HAZARD

#### 2.2 LABEL ELEMENTS

HAZARD STATEMENT ; NO SIGNIFICANT HAZARD

PRECAUTIONARY STATEMENT ; P264

2.3 OTHER HAZARDS ; THIS PRODUCT IS CLASSIFIED AS NON HAZARDOUS  
DOES NOT CONTAIN HAZARDOUS COMPONENT  
SUBSTANCES ABOVE THRESHOLDS FOR CONCERN.

### 3 Composition/Information on Ingredients

3.1 Substances ; not applicable

#### 3.2 Mixtures

Chemical nature

Preparation based on: polyol, catalyst, additives

Hazardous ingredients (GHS)

According to Regulation (EC) No 1272/2008

##### 2,2 Dimethylethoxyethanol

Content (W/W) > 0.1 % - <1.0% Acute Tox 4 (oral)

CAS Number 111-46-6

EC Number 216-940-1 H312, H318

REACH number 01-21199976346-26

P280, P305/P338/P351

##### Diazabicyclo (2.2.2)octane : Dabco

Content (W/W) > 0.1% - < 0.5% Acute Tox 4 (oral)

CAS Number 280-57-9 Acute Tox 2 (inhalation – vapour)

EC Number 205-999-9 Acute Tox 3 (dermal)

Skin Corr./Irrit. 1B

Aquatic Chronic 3

H302, H315, H319, H402, H412

P210, P273, P305/P351/P338

##### Ethane 1.2 Diol : diethylene glycol

Content (W/W) > 1 % - <10% Acute Tox 4 (oral)

CAS Number 111-46-6 STOT RE (kidney) 2

EC Number 203-872-2 H302, H373

REACH number 01-2119457857-21

INDEX number 603-140-00-6

P301+P312

## HAZARD AND PRECAUTIONARY STATEMENTS:

- H302 : Harmful if swallowed.  
H315 : Causes skin irritation.  
H318 : Causes serious eye damage.  
H319 : Causes serious eye irritation.  
H373 : May cause damage to organs through repeated and long term exposure.
- H402 : Harmful to aquatic life.  
H412 : Harmful to aquatic life with long lasting effects.
- P210 : Keep away from heat/sparks/open flames/hot surfaces – No smoking.  
P264 : Wash hands thoroughly after handling.  
P273 : Avoid release to the environment.  
P280 : Wear protective gloves/protective clothing/eye protection/face protection.  
P312 : Call a poison centre if you feel unwell.  
P301/P312 : If Swallowed call a poison centre/doctor if you feel unwell.  
P301/330/331 : If Swallowed rinse mouth. Do not induce vomiting.  
P305/351/338 : If in eyes rinse cautiously with water for several minutes. remove contact lenses if present and easy to do, Continue rinsing.

## 4 FIRST AID MEASURES

### 4.1 DESCRIPTION OF FIRST AID MEASURES

Inhalation : Remove the patient from exposure

Skin Contact : Wash of immediately with plenty of soap and water. Remove contaminated clothing.

Eye Contact : Immediately irrigate with an eyewash solution or water for 10 minutes holding the eyelids open.

Ingestion : Do not induce vomiting.

### 4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS

Inhalation : Inhalation may cause coughing , irritation of the respiratory system.

Skin contact : may cause skin irritation or an allergic reaction.

Eye contact : irritating to the eyes.

Ingestion: Ingestion may cause nausea and vomiting

SEEK MEDICAL ATTENTION IF SYMPTOMS PERSIST

## 5 FIRE FIGHTING MEASURES

NOT CLASSED AS FLAMABLE

IF INVOLVED IN A FIRE IT MAY EMIT NOXIOUS AND TOXIC FUMES

EXTINGUISHING MEDIA : NORMAL EXTINGUISHING MEDIA

FIRE FIGHTING EQUIPMENT : FULL PROTECTIVE EQUIPMENT INCLUDING RESPIRATORY PROTECTION

## 6 ACCIDENTAL RELEASE MEASURES

ENSURE SUITABLE PERSONAL PROTECTION DURING REMOVAL OF SPILLAGES.

ABSORB SPILLAGES INTO SAND, EARTH OR ANY SUITABLE ABSORBANT MATERIAL.

TRANSFER TO A CONTAINER FOR DISPOSAL.

WASH THE SPILLAGE AREA CLEAN WITH WATER AND A DETERGENT.

## 7 HANDLING AND STORAGE

7.1 Precautions for safe handling : Avoid contact with the skin of eyes. Contaminated clothing should be cleaned thoroughly before use. Ensure adequate ventilation in the designated work area. Adopt best manual handling considerations when handling, carrying and dispersing.

7.2 Storage Conditions : Keep sealed , avoid moisture ingress.

## 8 EXPOSURE CONTROLS /PERSONAL PROTECTION

WEAR SUITABLE GLOVES AND EYE FACE PROTECTION

OCCUPATIONAL EXPOSURE LIMITS : NONE ASSIGNED

## 9 PHYSICAL AND CHEMICAL PROPERTIES

FORM	:	UNPIGMENTED LIQUID
ODOUR THRESHHOLD	:	N/A
FLASH POINT	:	>160C
PH VALUE	:	7-9
SOLIDIFICATION TEMPERATURE	:	<0C
FLAMMABILITY	:	NON FLAMMABLE
DENSITY	:	1.07
VISCOSITY	20c	: 950MPaS-1

## 10 STABILITY AND REACTIVITY

HAZARDOUS REACTIONS : NONE KNOWN

HAZARDOUS DECOMPOSITION PRODUCTS : NONE AT AMBIENT TEMPERATURE

## 11 TOXICOLOGICAL INFORMATION

THIS HEALTH HAZARD ASSESMENT IS BASED ON A CONSIDERATION OF THE COMPOSITION OF THIS PRODUCT.

INHALATION : UNLIKELY TO BE HAZARDOUS DUE TO THE LOW VAPOUR PRESSURE OF THE MATERIAL AT AMBIENT TEMPERATURES

SKIN CONTACT : SLIGHT/ MILD IRRITANT  
MAY CAUSE SENSITISATION BY SKIN CONTACT

EYE CONTACT : SLIGHT/MILD IRRITANT

INGESTION : LOW ORAL TOXICITY

## 12 ECOLOGICAL INFORMATION

NO INFORMATION AVAILABLE

## 13 DISPOSAL CONSIDERATIONS

THE GENERATION OF WASTE SHOULD BE AVOIDED OR  
MINIMISED WHEREVER POSSIBLE.

DISPOSAL SHOULD BE IN ACCORDANCE WITH LOCAL  
AUTHORITY OR NATIONAL LEGISLATION. BURY ON AN  
AUTHORISED LANDFILL SITE OR INCINERATE UNDER  
APPROVED CONTROLLED CONDITIONS, USING INCINERATORS  
SUITABLE FOR THE DISPOSAL OF NOXIOUS CHEMICAL WASTE.

## 14 TRANSPORT INFORMATION

## 15 REGULATORY INFORMANTION

EEC CLASSIFICATION : NOT CLASSIFIED

HAZARD SYMBOL : NONE CLASSIFIED

## 16 OTHER INFORMATION

Safety, Health and environmental regulations/legislation specific for a substance or mixture

Commission Regulation (EU) no 453/2010 of 20/05/2010 amending Regulation No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals . (REACH), establishing a European Chemicals Agency amending Directive 1999/45/EC and repealing Council Regulation (EEC) no 793/93, 1488/94, 1907/2006 and amending directives 76/769/EEC, 91/155/EEC, 93/67/EEC,93/105/EC and 200/21/EC.

0118-2 PART A  
REVISION 01  
2<sup>nd</sup> September 2022

## Safety Data Sheet 0118-2 Part B

Date of print : 2017-06-23

### 1. Substance/preparations and company identification

- A. Product name : 0118-2 Part B
- B. Relevant identified uses of the substance or mixture and uses advised against
- Component in manufacturing of polyurethane compounds
- C. Details of the supplier of the safety data sheet.
- Company name : Europol
  - Head office) 9 Birchills Trading Estate Emery Road Brislington Bristol BS4 5PF,  
tel 00(44) 117 9715 500
- D. Emergency telephone number.
- Tel) 00(44)117 9715 500

### 2. Hazard identification

- A. Classification of substance
- Acute Toxicity.(inhalation dust, mist): Cat.4
  - Skin Corrosion/Irritation: Cat.2
  - Serious Eye Damage/Eye Irritation: Cat.2
  - Respiratory Sensitization: Cat.1
  - Carcinogenicity: Cat.2
  - Skin Sensitization: Cat.1
  - Specific Target Organ Toxicity-Single: Cat.3
  - Specific Target Organ Toxicity-Repeated: Cat.2

B. Label elements and hazard statement

- Pictogram



- Signal Word : Danger
- Hazard statements  
H315 : Causes skin irritation.



- H317 : May cause an allergic skin reaction.
- H319 : Causes serious eye irritation.
- H332 : Harmful if inhaled.
- H334 : May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H335 : May cause respiratory irritation.
- H351 : Suspected of causing cancer.
- H373 : May cause damage to organs through prolonged or repeated exposure.

- Precautionary statements(Prevention)

- P201 : Obtain special instructions before use.
- P202 : Do not handle until all safety precautions have been read and understood.
- P260 : Do not breathe dust/fume/gas/mist/vapors/spray.
- P261 : Avoid breathing dust/fume/gas/mist/vapours/spray.
- P264 : Wash ... thoroughly after handling.(cont'd)
- P271 : Use only outdoors or in a well-ventilated area.
- P272 : Contaminated work clothing should not be allowed out of workplace.
- P280 : Wear protective gloves/protective clothing/eye protection/face protection.
- P281 : Use personal protective equipment as required.
- P285 : In case of inadequate ventilation wear respiratory protection.

- Precautionary statements(Response)

- P312 : Call a POISON CENTRE or doctor/physician if you feel unwell.
- P314 : Get medical advice/attention if you feel unwell.
- P321 : Specific treatment.
- P362 : Take off contaminated clothing and wash before reuse.
- P363 : Wash contaminated clothing before reuse.
- P302+P352 : IF ON SKIN: Wash with plenty of soap and water.
- P304+P340 : IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P304+P341 : IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305+P351+P338 : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- P332+P313 : If skin irritation or rash occurs: Get medical advice/attention.
- P333+P313 : If skin irritation or rash occurs: Get medical advice/attention.
- P337+P313 : If eye irritation persists: Get medical advice/attention.
- P342+P311 : If experiencing respiratory symptoms: Call a poison center or doctor.
- P308+P313 : If exposed or concerned get medical advice/attention.

- Precautionary statements(Storage)

- P405 : Store locked up.
- P403+P233 : Store in a well-ventilated place. Keep container tightly closed.

- Precautionary statements(Disposal)  
P501 : Dispose of contents/container to ...

C. Other hazard

Ratings Ingredient	NFPA	Health	Fire	Reactivity
	4,4'-Methylene diphenyl diisocyanate		3	1

### 3. Composition/information on ingredients

Component	CAS Number	Content(w/w %)
Polymethylene polyphenyl isocyanate	9016-87-9	30~40
4,4'-Methylene diphenyl diisocyanate	101-68-8	40~50
Business Secret(S1)	Business Secret(S1)	5~15
Business Secret(S1)	Business Secret(S1)	0~10

### 4. First-Aid Measures

A. Eye contact

- If in eyes, rinse cautiously with room-temperature water for several minutes.
- Remove contact lenses if present and easy to do.
- If eye irritation persists, get medical attention.

B. Skin contact

- Remove contaminated clothing and wash affected area with soap and plenty of water
- Get medical attention if irritation or rash occurs.

C. Inhalation

- If inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing.
- If symptoms persist, get medical attention.

D. Ingestion

- If swallowed, wash out mouth thoroughly and give water to drink.
- Get prompt medical attention.
- Do not induce vomiting, unless instructed by medical personnel.

E. Most important symptoms and effects, both acute and delayed

- If inhaled, the product may cause harmful effects, respiratory irritation, and difficulty in breathing.

F. Indication of any immediate medical attention and special treatment needed

- Treat symptoms as they occur.

## 5. Fire-Fighting Measures

A. Extinguishing media

- Dry chemical powder, carbon dioxide, water spray or alcohol-resistant foam.
- For larger fires, use water spray, fog or regular foam.

B. Hazardous combustion products

- The product is not flammable, but may decompose if involved in a fire, producing smoke, and toxic vapours and gases (including hydrogen cyanide).

C. Fire fighting

- Move container from fire area if you can do it without risk.
- Leave a maximum space when fight a fire.
- Stay away from ends of tanks.
- Do not scatter spilled material with high-pressure water streams.
- Dike fire-control water for later disposal.
- Use agents suitable for type of surrounding fire.
- Avoid inhalation noxious vapor, keep with one's own back to the wind.

## 6. Accidental Release Measures

A. Personal precautions

- Do not touch spilled material.
- Ensure adequate ventilation.
- For large-scale spills, ensure full personal protection is worn.
- Evacuate unauthorized personnel from spillage area.

**B. Environmental precautions.**

- Prevent product from entering water courses or drainage system by using bunding or absorption with inert material.

**C. Methods for cleaning up or taking up**

- For large spills, recover by taking up mechanically or with an inert absorbent material such as waster cloth, dry sand, or earth.
- For small spills, wipe off with cloth or paper.
- Collect spill and place in a container for disposal. Wash contaminated surfaces with water and detergent, And collect washing for safe disposal.
- Neutralize with a solution of 5~10% Sodium carbonate, 0.2~2% detergents and 90~95% water.

**7. Handling and Storage****A. Precautions for safe handling**

- Observe all federal, state and local regulations when storing this substance.
- Should be handled in a ventilated area.
- The residue of the empty containers mixed with other substances may explode or cause harmful gas. .Therefore, don't use for keeping substances such as food, and don't work such as welding.

**B. Conditions for safe storage, including any incompatibilities**

- Use disposable containers and tools where possible.
- Store in a well-ventilated area between 25~40°C.
- Internal pressure increase in the container can cause break due to high heat and carbon dioxide after reacting water(or alcohols, amines), so keep it tightly closed when not in use.

**8. Exposure controls and personal protection****A. Exposure limits**

Component	Korean Regulation	ACGIH Regulation	Biological Exposure limit
4,4'-Methylene diphenyl diisocyanate	TWA-0.005ppm 0.055mg/m3	TLV-TWA- 0.005ppm	No data
Polymethylene polyphenyl isocyanate	No data	No data	No data

- ※ Note. TWA : time-weighted average  
STEL: short term exposure limit

#### B. Exposure controls

- Engineering controls
  - Local exhaust ventilation or use in a closed system is recommended.
- Personal protective equipment
  - The need for personal protective equipment should be based on a workplace risk assessment for the particular use.
  - Avoid skin and eye contact by wearing chemical resistant gloves (eg nitrile rubber, Viton) and eye protection/face shield. Where more extensive contact may occur, wear protective clothing (eg apron, overalls). Wear respiratory protective equipment (eg vapour mask) if exposure to vapours is possible.
  - Facilities for eye washing and showering are recommended within the immediate work area.

### 9. Physical and Chemical Properties

- A. Description: DARK AMBER TO BROWN, LIQUID
- B. Odor: MUSTY
- C. Odor threshold value: No data
- D. pH: Without corresponding
- E. Melting point/freezing point : No data
- F. Initial boiling point & boiling point range: No data
- G. Flashing point: >200°C
- H. Vaporization velocity: No data.
- I. Flammability (solid, gas): No data
- J. Ignition or explosion range maximum/minimum: Without corresponding
- K. Vapor pressure: negligible (at 20°C)
- L. Solubility: Reacts with water
- M. Vapor density: Without corresponding
- N. Specific gravity: 1.18 (25°C)
- O. N-octanol/water division coefficient: Without corresponding
- P. Spontaneous combustion temp.: No data
- Q. Decomposition temp.: No data
- R. Viscosity: 90~190cps(25°C)
- S. Molecular weight: No data

### 10. Stability and Reactivity

- A. Reactivity

- Reacts slowly and exothermically on contact with water, generating sufficient heat and pressure to rupture the container in a closed system.

B. Conditions to avoid

- High temperatures, flame, and moisture.

C. Incompatibilities

- Reacts with water. The following materials may react violently, producing heat: acid, alcohol, Aluminium Amine, and base. Oxidising agents may produce a fire or explosion hazard.

D. Hazardous decomposition products

- Thermal decomposition products may include highly toxic fumes of hydrogen cyanide and toxic oxides of carbon and nitrogen.

## 11. Toxicological information

A. HEALTH EFFECTS

• SKIN CONTACT

- The product is expected to cause respiratory and skin sensitisation.
- Isocyanate products are associated with asthma and other respiratory disorders, and skin allergies such as eczema.

• Carcinogenicity

- Suspected of causing cancer. There is limited evidence of carcinogenicity in humans and from animal studies.

• EYE CONTACT

- May cause irritation with redness, pain, and blurred vision
- Repeated and prolonged contact with irritants may cause conjunctivitis.

• Germ cell mutagenicity

- Not classified due to lack of data.

• Reproductive toxicity

- Not classified due to lack of data.

• STOT-single exposure

- The product may cause respiratory irritation if inhaled.

• STOT-repeated exposure

- May cause damage to the respiratory system through prolonged or repeated exposure.

• Aspiration hazard

- Not expected to meet the criteria for classification.

• Acute toxicity

- The product is classified as toxic by inhalation route. May cause irritation of the respiratory system, chest pain, breathing difficulty, and impaired lung function. High concentration may produce chemical pneumonia and inflammation which may be fatal. Other symptoms include

headache, nausea, and fever.  
- Acute Tox.(Inhalation: vapor) : Category 4

## 12. Ecological information

- A. Environmental impact rating
  - No data available
- B. Acute aquatic toxicity
  - No data available
- C. Degradability
  - No data available
- D. Log bioconcentration factor
  - No data available
- E. Log octanol/water partition coefficient
  - No data available

## 13. Disposal Considerations

- A. Disposal method
  - The recommended method of disposal is incineration. Disposal via the drains or landfill is not recommended. Use a licensed waste disposal contractor. Disposal must be in accordance with current national and local regulations. Chemical residues generally count as special waste. General EU requirements are given in Directive 2008/98/EC. Product or wastes may be neutralized with a solution of 5~10% sodium carbonate, 0.2-2% detergent, and 90~95% water. Containers of this Material may be hazardous when emptied due to product residue.

## 14. Transport Information

- A. UN number
  - Not classified as dangerous goods for transport
- B. UN proper shipping name
  - Not applicable
- C. Dangerousness grade of transportation
  - Not applicable
- D. Container grade
  - Not applicable
- E. Substance of sea pollution

- Not marine pollutant/environmentally hazardous
- F. Safety countermeasure
- No data

## 15. Regulatory Information

- A. Safety, health and environmental regulations/legislation specific for the substance or mixture
- UK: Control of substances Hazardous to Health Regulations 2002(COSHH), as amended
  - Workplace Exposure Limits EH40/2005 (Second edition published 2011), Health and Safety Executive.
- B. Chemical safety assessment
- Not available

## 16. Other Information

A. Reference

- UN GHS File
- ECHA: <http://clp-inventory.echa.europa.eu/>
- EU Indicative Occupational Exposure Limit Values(IOELVs): Directives 2000/39/EC,

2006/15/EC and 2009/161/EU

B. Creation date : 2017. 06. 23

E. Revision date

F. The others : -