









Printing date 09/23/2016

Reviewed on 09/22/2016

1 Identification

- Product identifier

- Trade name: CILBOND 80ET

- Article number: R025403-00

- Application of the substance / the mixture Adhesives
- Details of the supplier of the safety data sheet

- Manufacturer/Supplier:

Kommerling UK Ltd 217 Walton Summit Road

Bamber Bridge Preston, Lancashire PR5 8AQ United Kingdom +44 (0)1772 322888 +44 (0)1772 315853 sds@cilbond.com

(calls from USA: Please dial 01149 instead of +49)

- Information department:

Abteilung: C-U Qualitäts- und Umweltmanagementcenter

(department: C-U Quality- and Environmentalmanagementcenter)

Tel.: +49 (0)6331/56-2553; Fax.: +49 (0)6331/56-1091

e-Mail: Productsafety@Koe-Chemie.de

(calls from USA: Please dial 01149 instead of +49)

- Emergency telephone number:

In case of poisoning: GBK-EMTEL International

Tel.(24h): +49(0)6132/84463 (all languages)

In case of transport accidents:

Tel.(24h): (001) 352 323 3500 (Infotrac - Contract ID: 90373 / GBK)

- Emergency-Phone from inside USA/Canada (toll free):

1 800 535 5053 (Infotrac - Contract ID: 90373 / GBK)

2 Hazard(s) identification

- Classification of the substance or mixture

Flam. Liq. 2 H225 Highly flammable liquid and vapor. Acute Tox. 4 H312 Harmful in contact with skin.

Skin Irrit. 2 H315 Causes skin irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Repr. 2 H361 Suspected of damaging fertility or the unborn child.

STOT SE 2 H371 May cause damage to organs.

STOT SE 3 H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

STOT RE 2 H373 May cause damage to the hearing organs through prolonged or repeated

exposure.

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- Label elements
- GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

- Hazard pictograms







GHS02 GHS07 GHS08

- Signal word Danger

- Hazard-determining components of labeling:

xylene, mixed isomers, pure

toluene

1,1'-(1,3-phenylene)bis-1H-pyrrole-2,5-dione poly dinitrosobenzene

- Hazard statements

H225 Highly flammable liquid and vapor.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H361 Suspected of damaging fertility or the unborn child.

H371 May cause damage to organs.

H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

H373 May cause damage to the hearing organs through prolonged or repeated exposure.

- Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Keep container tightly closed.

Take precautionary measures against static discharge.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools.

Do not breathe mist/vapours/spray.

Avoid contact during pregnancy/while nursing.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Contaminated work clothing must not be allowed out of the workplace.

[In case of inadequate ventilation] wear respiratory protection.

IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF exposed or concerned: Get medical advice/attention.

If skin irritation occurs: Get medical advice/attention.

If skin irritation or rash occurs: Get medical advice/attention.

Get medical advice/attention if you feel unwell.

Do NOT induce vomiting.

In case of fire: Use for extinction: CO2, powder or water spray.

Take off contaminated clothing and wash it before reuse.

Store in a well-ventilated place. Keep container tightly closed.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- Other hazards

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In the event of a large-scale use of the product, ignition sources in the immediate proximity and in low-lying areas, such as welding equipment, bells, heating elements, refrigerators, storage heaters etc. should be switched off! Erect warning signs warning of the hazardous risk of explosive atmosphere!

- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

3 Composition/information on ingredients

- Chemical characterization: Mixtures
- Description: Mixture of several substances

| - Dangerous components: | | |
|---|--|---------|
| 1330-20-7 | xylene, mixed isomers, pure | 25-50% |
| 108-88-3 | 108-88-3 toluene | |
| 100-41-4 ethylbenzene | | < 12.5% |
| 3006-93-7 | 06-93-7 1,1'-(1,3-phenylene)bis-1H-pyrrole-2,5-dione | |
| 9003-34-3 poly dinitrosobenzene 25068-38-6 epoxy resin (bisphenol-A/epichlorhydrin; molecular weight ≤ 700) | | < 5.0% |
| | | < 1.0% |

⁻ SVHC Doesn't contain SVHC-substances

4 First-aid measures

- Description of first aid measures
- After inhalation:

Supply fresh air; consult doctor in case of complaints.

In case of unconsciousness place patient stably in side position for transportation.

- After skin contact:

Treat affected skin with cotton wool or cellulose. Then wash and rinse thoroughly with water and a mild cleaning agent.

- After eye contact:

Rinse opened eye for several minutes under running water. Then consult a doctor.

- After swallowing: Do not induce vomiting; immediately call for medical help.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed

No further relevant information available.

- Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- Extinguishing media
- Suitable extinguishing agents:

Water spray

Alcohol resistant foam

Fire-extinguishing powder

Carbon dioxide

- For safety reasons unsuitable extinguishing agents: Water with full jet
- Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

- Advice for firefighters
- **Protective equipment:** Wear self-contained respiratory protective device.

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6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Keep away from ignition sources

Use respiratory protective device against the effects of fumes/dust/aerosol.

- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up: Pick up mechanically.
- Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- Handling:
- Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.
- Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Fumes can combine with air to form an explosive mixture.

- Conditions for safe storage, including any incompatibilities
- Storage
- Requirements to be met by storerooms and receptacles: Prevent any seepage into the ground.
- Information about storage in one common storage facility: Store away from foodstuffs.
- Further information about storage conditions:

Protect from frost.

Keep receptacle tightly sealed.

Protect from heat and direct sunlight.

Store receptacle in a well ventilated area.

Store in dry conditions.

- Storage class (according german VCI-concept): 3
- Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see item 7.
- Control parameters
- Components with limit values that require monitoring at the workplace:

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At this time, the other constituents have no known exposure limits.

| 108-88-3 toluene | |
|-------------------|---|
| PEL (USA) | Long-term value: 200 ppm Ceiling limit value: 300; 500* ppm *10-min peak per 8-hr shift |
| REL (USA) | Short-term value: 560 mg/m³, 150 ppm Long-term value: 375 mg/m³, 100 ppm |
| TLV (USA) | Long-term value: 75 mg/m³, 20 ppm BEI |
| 100-41-4 ethylben | zene |
| PEL (USA) | Long-term value: 435 mg/m³, 100 ppm |
| REL (USA) | Short-term value: 545 mg/m³, 125 ppm Long-term value: 435 mg/m³, 100 ppm |

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TLV (USA)

Long-term value: 87 mg/m³, 20 ppm
BEI

IOELV (European Union)

Short-term value: 884 mg/m³, 200 ppm
Long-term value: 442 mg/m³, 100 ppm

- Ingredients with biological limit values:

1330-20-7 xylene, mixed isomers, pure

BEI (USA) 1.5 g/g creatinine

Medium: urine Time: end of shift

Parameter: Methylhippuric acids

108-88-3 toluene

BEI (USA) 0.02 mg/L

Medium: blood

Time: prior to last shift of workweek

Parameter: Toluene

0.03 mg/L
Medium: urine
Time: end of shift
Parameter: Toluene
0.3 mg/g creatinine

Medium: urine Time: end of shift

Parameter: o-Cresol with hydrolysis (background)

100-41-4 ethylbenzene

BEI (USA) 0.7 g/g creatinine

Medium: urine

Time: end of shift at end of workweek

Parameter: Sum of mandelic acid and phenylglyoxylic acid (nonspecific, semi-

quantitative)

Medium: end-exhaled air

Time: not critical

Parameter: Ethyl benzene (semi-quantitative)

- Exposure controls

- Personal protective equipment:

- General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Immediately remove all soiled and contaminated clothing.

- Breathing equipment:

Not required with good ventilation and/or adequate extractor facilities

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Short term filter device:

A2 (DIN EN 14387 / DIN EN 141)

- Protection of hands:

Direct contact with the chemical preparation must be avoided by organizational measures. Apply skin protectant before working with gloves to avoid skin swellings and use a skin cleansing and skincare product after the work.

Compliance with the stated penetration time (starts with the first product contact) must be ensured! The gloves need to be disposed of after the penetration time and new gloves used!

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- For the permanent contact gloves made of the following materials are suitable:

If longer exposure to the chemical preparation is necessary, a sturdy overglove against mechanical strain is recommended in combination with the "Barrier 02-100" underglove from Ansell (penetration time 480 min).

- For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:

Fluorinated rubber (Viton) [0.7mm - penetration time 15 min]

- As protection from splashes gloves made of the following materials are suitable:

Recommended for protection from splashes: disposable nitrile gloves (minimum thickness 0.12 mm) with long cuffs. After contact with the chemical preparation, take the disposable nitrile glove off immediately and put on a new disposable nitrile glove.

- Eye protection: Safety glasses

9 Physical and chemical properties

| - Information c | on basic physical | and chemical | l nronerties |
|-----------------|-------------------|--------------|--------------|
| | | | |

- General Information

- Appearance:

Form: Fluid
Color: Black
- Odor: Solvent-like

- Change in condition

Boiling point/Boiling range: 110 °C (230 °F)

- Flash point: 15 $^{\circ}$ C (59 $^{\circ}$ F)

- Ignition temperature: 430 °C (806 °F)

- Explosion limits:

Lower: 1.0 Vol % **Upper:** 7.8 Vol %

- Vapor pressure at 20 °C (68 °F): 29 hPa (22 mm Hg)

- **Density at 20 °C (68 °F):** 0.92 g/cm³ (7.677 lbs/gal)

- Solubility in / Miscibility with

Water: Partly soluble.

- Viscosity:

Kinematic at 40 °C (104 °F): 341 mm²/s (Brookfield)

- Solvent content:

Organic solvents: 77.1 % VOC content: 77.2 %

710.6 g/l / 5.93 lb/gl

- Other information No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- Chemical stability
- Thermal decomposition / conditions to be avoided:

To avoid thermal decomposition do not overheat.

- Possibility of hazardous reactions Reacts with strong acids and oxidizing agents.
- Conditions to avoid No further relevant information available.
- **Incompatible materials:** No further relevant information available.

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- Hazardous decomposition products:

None, if used according to instructions and stored according to regulations

11 Toxicological information

- Information on toxicological effects
- Acute toxicity:

| | - LD/LC50 values that are relevant for classification: | | | |
|------------------------------|--|----------|--------------|--|
| ATE (Acute Toxicity Estimate | | | y Estimates) | |
| | Oral | LD50 | 3595 mg/kg | |
| | Dermal | LD50 | 1844 mg/kg | |
| | Inhalative | LC50/4 h | 1.29 mg/l | |

| Orai | LDSU | 3393 Hig/kg |
|------------|-------------|------------------------------------|
| Dermal | LD50 | 1844 mg/kg |
| Inhalative | LC50/4 h | 1.29 mg/l |
| 1330-20-7 | xylene, m | nixed isomers, pure |
| Oral | LD50 | 3523 mg/kg (rat) |
| Dermal | LD50 | 1100 mg/kg (ATE) |
| Inhalative | LC50/4 h | 11 mg/l (ATE) |
| 108-88-3 t | oluene | |
| Oral | LD50 | 5000 mg/kg (rat) |
| Dermal | LD50 | 12124 mg/kg (rab) |
| Inhalative | LC50/4 h | 5320 mg/l (mus) |
| 100-41-4 € | ethylbenze | ene |
| Oral | LD50 | 3500 mg/kg (rat) |
| Dermal | LD50 | 17800 mg/kg (rbt) |
| Inhalative | LC50/4 h | 11 mg/l (ATE) |
| 3006-93-7 | 1,1'-(1,3-ր | phenylene)bis-1H-pyrrole-2,5-dione |
| Oral | LD50 | 500 mg/kg (ATE) |
| Dermal | LD50 | 300 mg/kg (ATE) |
| Inhalative | LC50/4 h | 0.055 mg/l (Rat) |
| 9003-34-3 | poly dinit | rosobenzene |
| Dermal | LD50 | 1100 mg/kg (ATE) |
| Inhalative | LC50/4 h | 11 mg/l (ATE) |
| D .: | | |

- Primary irritant effect:
- on the skin: Irritant to skin and mucous membranes.
- Additional toxicological information:

Harmful

The homogeneous mixing of this product is guaranteed through continuous physical tests. What were formerly dusty raw materials are completely integrated into the liquid/pasty mass. The possible risk "Fatal if inhaled (H330)", caused through formerly dusty raw materials, is therefore excluded in this mixture.

Toxic

- Carcinogenic categories

| - IARC (International Agency for Research on Cancer) | |
|--|---|
| 1330-20-7 xylene, mixed isomers, pure | 3 |
| 128-37-0 2,6-di-tert-butyl-p-cresol | 3 |

- NTP (National Toxicology Program)

None of the ingredients is listed.

- OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

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12 Ecological information

- Toxicity
- Aquatic toxicity:

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

- Persistence and degradability No further relevant information available.
- Behavior in environmental systems:
- Bioaccumulative potential No further relevant information available.
- Mobility in soil No further relevant information available.
- Additional ecological information:
- **General notes:** Do not allow product to reach ground water, water course or sewage system.
- Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- vPvB: Not applicable.
- Other adverse effects No further relevant information available.

13 Disposal considerations

- Waste treatment methods
- Recommendation: Disposal in accordance with official regulations
- Uncleaned packagings:
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

| _ | U | N- | Nι | ım | ber |
|---|---|----|----|----|-----|
| | | | | | |

- DOT, ADR, RID, ADN, IMDG, IATA UN1133

- UN proper shipping name

- DOT Adhesives
- ADR/RID/ADN 1133 Adhesives
- IMDG, IATA ADHESIVES

- Transport hazard class(es)
- DOT



- Class 3 Flammable liquids

- Label

- ADR, RID, ADN, IMDG, IATA



- Class 3 Flammable liquids

- Label 3

- Packing group

- DOT, ADR,RID,ADN, IMDG, IATA

- Environmental hazards: Not applicable.

- Special precautions for user Warning: Flammable liquids

- Danger code (Kemler): 30 - EMS Number: F-E,S-D

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| - Stowage Category | (Contd. of pag |
|---|--|
| - Transport in bulk according to Annex MARPOL73/78 and the IBC Code | I II of Not applicable. |
| - Transport/Additional information: | |
| - ADR/RID/ADN - Excepted quantities (EQ) | Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml |
| - IMDG - Limited quantities (LQ) - Excepted quantities (EQ) | 5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml |
| - UN "Model Regulation": | UN 1133 ADHESIVES, 3, II |

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara

| Guid | |
|---|--|
| - Section 355 (extremely hazardous substances): | |
| None of the ingredient is listed. | |
| | |
| | |

- Section 313 (Specific toxic chemical listings):

 1330-20-7 xylene, mixed isomers, pure

 78-93-3 butanone
 - 67-56-1 methanol
- TSCA (Toxic Substances Control Act):

All ingredients are listed.

- Proposition 65
- Chemicals known to cause cancer:

None of the ingredients is listed.

- Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

- Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

- Chemicals known to cause developmental toxicity:

67-56-1 methanol

- Cancerogenity categories

| | - Cancerog | - Cancerogenity categories | | |
|---|--|--|----|--|
| - EPA (Environmental Protection Agency) | | | | |
| | 1330-20-7 | xylene, mixed isomers, pure | I | |
| | 78-93-3 | butanone | I | |
| | - TLV (Thre | eshold Limit Value established by ACGIH) | | |
| | 1330-20-7 | xylene, mixed isomers, pure | A4 | |
| | 128-37-0 | 2,6-di-tert-butyl-p-cresol | A4 | |
| | 77-58-7 | dibutyltin dilaurate | A4 | |
| | - MAK (German Maximum Workplace Concentration) | | | |
| | 128-37-0 | 2,6-di-tert-butyl-p-cresol | 4 | |
| | 96-29-7 | 2-butanone oxime | 2 | |

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- NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

For industrial use only.

- Department issuing SDS:
- Date of preparation / last revision 09/23/2016 / -
- Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transport Association

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic SVHC: Substances of Very High Concern vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

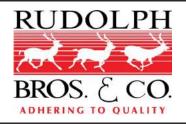
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Flam. Liq. 2: Flammable liquids – Category 2 Acute Tox. 4: Acute toxicity – Category 4 Skin Irrit. 2: Skin corrosion/irritation – Category 2 Skin Sens. 1: Skin sensitisation – Category 1 Repr. 2: Reproductive toxicity – Category 2

STOT SE 2: Specific target organ toxicity (single exposure) – Category 2 STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

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