



# KÖMMERLING

## SAFETY DATA SHEET CILBOND 24

### 1. Identification

#### Product identifier

Product name CILBOND 24

#### Recommended use of the chemical and restrictions on use

Application Adhesive.

Uses advised against No specific uses advised against are identified.

#### Details of the supplier of the safety data sheet

Supplier Kömmerring 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

#### Emergency telephone number

Emergency telephone +44(0)7778 029192

### 2. Hazard(s) identification

#### Classification of the substance or mixture

Physical hazards Flam. Liq. 2 - H225

Health hazards Skin Irrit. 2 - H315 Eye Irrit. 2A - H319 Skin Sens. 1 - H317 Carc. 2 - H351 Repr. 2 - H361d  
STOT SE 3 - H336 STOT RE 2 - H373

Environmental hazards Aquatic Chronic 3 - H412

Human health See Section 11 for additional information on health hazards.

Physicochemical The product is highly flammable. Vapors may form explosive mixtures with air. Vapors may be ignited by a spark, a hot surface or an ember.

#### Label elements

##### Pictogram



Signal word

Danger

## CILBOND 24

### Hazard statements

H225 Highly flammable liquid and vapor.  
 H315 Causes skin irritation.  
 H317 May cause an allergic skin reaction.  
 H319 Causes serious eye irritation.  
 H336 May cause drowsiness or dizziness.  
 H351 Suspected of causing cancer.  
 H361d Suspected of damaging the unborn child.  
 H373 May cause damage to organs through prolonged or repeated exposure.  
 H412 Harmful to aquatic life with long lasting effects.

### Precautionary statements

P201 Obtain special instructions before use.  
 P202 Do not handle until all safety precautions have been read and understood.  
 P210 Keep away from heat, sparks, open flames and hot surfaces. No smoking.  
 P240 Ground/bond container and receiving equipment.  
 P241 Use explosion-proof electrical equipment.  
 P242 Use only non-sparking tools.  
 P243 Take precautionary measures against static discharge.  
 P260 Do not breathe vapor/spray.  
 P261 Avoid breathing vapor/spray.  
 P264 Wash contaminated skin thoroughly after handling.  
 P271 Use only outdoors or in a well-ventilated area.  
 P272 Contaminated work clothing must not be allowed out of the workplace.  
 P273 Avoid release to the environment.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P302+P352 If on skin: Wash with plenty of water.  
 P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 P304+P340 If inhaled: Remove person to fresh air and keep 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.  
 P308+P313 If exposed or concerned: Get medical advice/attention.  
 P312 Call a poison center/doctor if you feel unwell.  
 P314 Get medical advice/attention if you feel unwell.  
 P321 Specific treatment (see medical advice on this label).  
 P332+P313 If skin irritation 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.  
 P362+P364 Take off contaminated clothing and wash it before reuse.  
 P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.  
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
 P403+P235 Store in a well-ventilated place. Keep cool.  
 P405 Store locked up.  
 P501 Dispose of contents/container in accordance with national regulations.

### Contains

butanone, toluene, xylene, methenamine, 2-butanone oxime

### Other hazards

This product does not contain any substances classified as PBT or vPvB.

### 3. Composition/information on ingredients

#### Mixtures

**CILBOND 24**

<b>butanone</b>		<b>30-60%</b>
CAS number: 78-93-3	REACH registration number: 01-2119457290-43-XXXX	
<b>Classification</b>		
Flam. Liq. 2 - H225		
Eye Irrit. 2 - H319		
STOT SE 3 - H336		
<b>toluene</b>		<b>10-30%</b>
CAS number: 108-88-3	REACH registration number: 01-2119471310-51-XXXX	
<b>Classification</b>		
Flam. Liq. 2 - H225		
Skin Irrit. 2 - H315		
Repr. 2 - H361d		
STOT SE 3 - H336		
STOT RE 2 - H373		
Asp. Tox. 1 - H304		
<b>xylene</b>		<b>10-30%</b>
CAS number: 1330-20-7	REACH registration number: 01-2119488216-32-XXXX	
<b>Classification</b>		
Flam. Liq. 3 - H226		
Acute Tox. 4 - H312		
Acute Tox. 4 - H332		
Skin Irrit. 2 - H315		
Eye Irrit. 2A - H319		
STOT SE 3 - H335		
STOT RE 2 - H373		
Asp. Tox. 1 - H304		
<b>Solvent naphtha (petroleum), light arom.</b>		<b>5-10%</b>
CAS number: 64742-95-6	REACH registration number: 01-2119455851-35-XXXX	
<b>Classification</b>		
Flam. Liq. 3 - H226		
STOT SE 3 - H335		
Asp. Tox. 1 - H304		
Aquatic Chronic 2 - H411		

**CILBOND 24**

<b>Modified Aluminium Triphosphate Compound</b>	<b>1-5%</b>
CAS number: 13939-25-8	
<b>Classification</b> Eye Irrit. 2A - H319	
<b>resorcinol</b>	<b>1-5%</b>
CAS number: 108-46-3	REACH registration number: 01-2119480136-40-XXXX
M factor (Acute) = 1	
<b>Classification</b> Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1B - H317 STOT SE 1 - H370 Aquatic Acute 1 - H400	
<b>methenamine</b>	<b>1-5%</b>
CAS number: 100-97-0	REACH registration number: 01-2119474895-20-XXXX
<b>Classification</b> Flam. Sol. 2 - H228 Skin Sens. 1 - H317	
<b>Carbon Black</b>	<b>1-5%</b>
CAS number: 1333-86-4	REACH registration number: 01-2119384822-32-XXXX
<b>Classification</b> Not Classified	
<b>P-BENZOQUINONE DIOXIME</b>	<b>1-5%</b>
CAS number: —	
<b>Classification</b> Flam. Sol. 2 - H228 Acute Tox. 4 - H302	

## CILBOND 24

<b>2-butanone oxime</b>	<b>&lt;1%</b>
CAS number: 96-29-7	REACH registration number: 01-2119539477-28-XXXX
<b>Classification</b>	
Eye Dam. 1 - H318	
Skin Sens. 1 - H317	
Carc. 2 - H351	
<b>selenium</b>	<b>&lt;1%</b>
CAS number: 7782-49-2	REACH registration number: 01-2119981706-25-XXXX
<b>Classification</b>	
Acute Tox. 3 - H301	
Acute Tox. 3 - H331	
STOT RE 2 - H373	
Aquatic Chronic 4 - H413	
<b>2,6-Di-Tert-butyl P-Cresol (BHT)</b>	<b>&lt;1%</b>
CAS number: 128-37-0	
M factor (Acute) = 10	M factor (Chronic) = 1
<b>Classification</b>	
Aquatic Acute 1 - H400	
Aquatic Chronic 1 - H410	

The Full Text for all Hazard Statements are Displayed in Section 16.

#### 4. First-aid measures

##### Description of first aid measures

<b>General information</b>	Move affected person to fresh air at once. Get medical attention if any discomfort continues.
<b>Inhalation</b>	Move affected person to fresh air at once. For breathing difficulties, oxygen may be necessary. If breathing stops, provide artificial respiration. Keep affected person warm and at rest. Get medical attention.
<b>Ingestion</b>	Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Remove affected person from source of contamination. Rinse mouth thoroughly with water. Get medical attention. Keep affected person away from heat, sparks and flames.
<b>Skin Contact</b>	Remove affected person from source of contamination. Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.
<b>Eye contact</b>	Remove affected person from source of contamination. Remove any contact lenses and open eyelids wide apart. Rinse with water. Continue to rinse for at least 15 minutes and get medical attention. Consult a physician for specific advice. Show this Safety Data Sheet to the medical personnel.
<b>Protection of first aiders</b>	First aid personnel should wear appropriate protective equipment during any rescue.

##### Most important symptoms and effects, both acute and delayed

## CILBOND 24

<b>General information</b>	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
<b>Inhalation</b>	Vapors may cause headache, fatigue, dizziness and nausea. Vapours may cause drowsiness and dizziness.
<b>Ingestion</b>	May cause stomach pain or vomiting.
<b>Skin contact</b>	Prolonged or repeated exposure may cause severe irritation.
<b>Eye contact</b>	Causes eye irritation.
<b><u>Indication of immediate medical attention and special treatment needed</u></b>	
<b>Notes for the doctor</b>	Treat symptomatically.

### 5. Fire-fighting measures

#### Extinguishing media

**Suitable extinguishing media** Extinguish with the following media: Foam. Dry chemicals, sand, dolomite etc.

**Unsuitable extinguishing media** Water.

#### Special hazards arising from the substance or mixture

**Flammability Class** No Uniform Fire Code noted.

**Specific hazards** Vapors are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. Vapors may form explosive mixtures with air. Vapors may be ignited by a spark, a hot surface or an ember.

**Hazardous combustion products** Toxic gases or vapors. Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Nitrous gases (NO<sub>x</sub>).

#### Advice for firefighters

**Protective actions during firefighting** Move containers from fire area if it can be done without risk. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

**Special protective equipment for firefighters** Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Wear chemical protective suit.

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Wear protective clothing as described in Section 8 of this safety data sheet.

#### Environmental precautions

**Environmental precautions** The product contains a substance which is harmful to aquatic organisms and which may cause long-term adverse effects in the aquatic environment. Do not discharge into drains or watercourses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

#### Methods and material for containment and cleaning up

## CILBOND 24

**Methods for cleaning up** Eliminate all ignition sources if safe to do so. No smoking, sparks, flames or other sources of ignition near spillage. Stop leak if safe to do so. If leakage cannot be stopped, evacuate area. Provide adequate ventilation. Cover large spillages with alcohol-resistant foam. Contain spillage with sand, earth or other suitable non-combustible material. Collect spillage for reclamation or disposal in sealed containers via a licensed waste contractor. Containers with collected spillage must be properly labeled with correct contents and hazard symbol.

**Reference to other sections** For waste disposal, see Section 13. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards.

### 7. Handling and storage

#### Precautions for safe handling

**Usage precautions** Static electricity and formation of sparks must be prevented. Keep away from heat, sparks and open flame. Use explosion-proof electrical, ventilating and lighting equipment. Avoid spilling. Avoid breathing vapours. In case of insufficient ventilation, wear suitable respiratory equipment.

**Advice on general occupational hygiene** Do not eat, drink or smoke when using this product. Provide eyewash station. Provide shower facilities near the workplace. Wash promptly with soap and water if skin becomes contaminated.

#### Conditions for safe storage, including any incompatibilities

**Storage precautions** Store in tightly-closed, original container in a well-ventilated place. Stir Thoroughly before and during use. Refer to SDS.

**Storage class** Flammable liquid storage.

#### Specific end uses(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.2.

### 8. Exposure Controls/personal protection

#### Control parameters

#### Occupational exposure limits

##### **butanone**

Long-term exposure limit (8-hour TWA): ACGIH 200 ppm 590 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): ACGIH 300 ppm 885 mg/m<sup>3</sup>

Long-term exposure limit (8-hour TWA): OSHA 200 ppm 590 mg/m<sup>3</sup>

##### **toluene**

Long-term exposure limit (8-hour TWA): OSHA 200 ppm

Long-term exposure limit (8-hour TWA): ACGIH 20 ppm 75 mg/m<sup>3</sup>

A4

Ceiling exposure limit: OSHA 300 ppm

##### **xylene**

Long-term exposure limit (8-hour TWA): OSHA 100 ppm 435 mg/m<sup>3</sup>

Long-term exposure limit (8-hour TWA): ACGIH 100 ppm 434 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): ACGIH 150 ppm 651 mg/m<sup>3</sup>

A4

##### **resorcinol**

Long-term exposure limit (8-hour TWA): ACGIH 10 ppm 45 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): ACGIH 20 ppm 90 mg/m<sup>3</sup>

A4

##### **Carbon Black**

## CILBOND 24

Long-term exposure limit (8-hour TWA): OSHA 3.5 mg/m<sup>3</sup>

Long-term exposure limit (8-hour TWA): ACGIH 3 mg/m<sup>3</sup> inhalable fraction

A3

### selenium

Long-term exposure limit (8-hour TWA): ACGIH 0.2 mg/m<sup>3</sup>  
as Se

### 2,6-Di-Tert-butyl P-Cresol (BHT)

Long-term exposure limit (8-hour TWA): ACGIH 2 mg/m<sup>3</sup> inhalable fraction and vapor  
A4

ACGIH = American Conference of Governmental Industrial Hygienists.

OSHA = Occupational Safety and Health Administration.

A4 = Not Classifiable as a Human Carcinogen.

A3 = Confirmed Animal Carcinogen with Unknown Relevance to Humans.

### butanone (CAS: 78-93-3)

**Immediate danger to life  
and health** 3000 ppm

### toluene (CAS: 108-88-3)

**Immediate danger to life  
and health** 500 ppm

### Carbon Black (CAS: 1333-86-4)

**Immediate danger to life  
and health** 1750 mg/m<sup>3</sup>

### Amorphous Silica (CAS: 7631-86-9)

**Immediate danger to life  
and health** 3000 mg/m<sup>3</sup>

### selenium (CAS: 7782-49-2)

**Immediate danger to life  
and health** 1 mg/m<sup>3</sup>

### Exposure controls

#### Protective equipment



#### Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Ensure that the direction of airflow is clearly away from the worker. Observe any occupational exposure limits for the product or ingredients. Avoid inhalation of vapors. Ensure operatives are trained to minimize exposure.

#### Eye/face protection

Wear chemical splash goggles.

## CILBOND 24

<b>Hand protection</b>	It is recommended that gloves are made of the following material: Rubber (natural, latex). Polyvinyl chloride (PVC). Neoprene. To protect hands from chemicals, gloves should comply with European Standard EN374.
<b>Other skin and body protection</b>	Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapor contact.
<b>Hygiene measures</b>	Do not smoke in work area. Contaminated clothing should be placed in a closed container for disposal or decontamination. Wash at the end of each work shift and before eating, smoking and using the toilet. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.
<b>Respiratory protection</b>	Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. When spraying, wear a suitable supplied-air respirator. If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: Gas filter, type A2. Check that the respirator fits tightly and the filter is changed regularly.
<b>Environmental exposure controls</b>	Store in a demarcated banded area to prevent release to drains and/or watercourses. Residues and empty containers should be taken care of as hazardous waste according to local and national provisions. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### 9. Physical and Chemical Properties

#### Information on basic physical and chemical properties

<b>Appearance</b>	Liquid.
<b>Color</b>	Black.
<b>Odor</b>	Characteristic. Aromatic hydrocarbons.
<b>Melting point</b>	<-50°C
<b>Initial boiling point and range</b>	>80°C @ 760 mm Hg
<b>Flash point</b>	5-10°C CC (Closed cup).
<b>Evaporation rate</b>	0.8 (butyl acetate = 1)
<b>Upper/lower flammability or explosive limits</b>	Lower flammable/explosive limit: 1.8 Upper flammable/explosive limit: 11.5
<b>Vapour pressure</b>	<20 mm Hg @ 25°C
<b>Vapour density</b>	(Air=1) >1
<b>Relative density</b>	0.94-0.99 @ 25°C
<b>Auto-ignition temperature</b>	>250°C
<b>Other information</b>	None.
<b>Refractive index</b>	Not known.
<b>Volatile organic compound</b>	No information available.

### 10. Stability and reactivity

<b>Reactivity</b>	The reactivity data for this product will be typical of those for the following class of materials: Hydrocarbons. Flammable/combustible materials.
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## CILBOND 24

<b>Stability</b>	Stable at normal ambient temperatures and when used as recommended.
<b>Possibility of hazardous reactions</b>	None known.
<b>Conditions to avoid</b>	Avoid heat.
<b>Materials to avoid</b>	Avoid contact with strong oxidizing agents. Avoid contact with strong reducing agents.
<b>Hazardous decomposition products</b>	Heating may generate flammable vapors. Heating may generate the following products: Carbon monoxide (CO). Carbon dioxide (CO <sub>2</sub> ). Nitrous gases (NO <sub>x</sub> ).

### 11. Toxicological information

#### Information on toxicological effects

**Toxicological effects** No information available.

#### Acute toxicity - oral

**ATE oral (mg/kg)** 6,293.27

#### Acute toxicity - dermal

**ATE dermal (mg/kg)** 10,843.85

#### Acute toxicity - inhalation

**ATE inhalation (gases ppm)** 44,361.2

**ATE inhalation (dusts/mists mg/l)** 69.44

#### Specific target organ toxicity - single exposure

**Target organs** Respiratory system, lungs Mucous membranes

#### Specific target organ toxicity - repeated exposure

**Target organs** Respiratory system, lungs Mucous membranes

#### Aspiration hazard

**Aspiration hazard** May be harmful if swallowed and enters airways.

#### **General information**

Extensive use of the product in areas with inadequate ventilation may result in the accumulation of hazardous vapor concentrations.

#### **Inhalation**

Harmful by inhalation. Gas or vapor in high concentrations may irritate the respiratory system. Vapors may cause headache, fatigue, dizziness and nausea.

#### **Ingestion**

May cause internal injury. Nausea, vomiting.

#### **Skin Contact**

Product has a defatting effect on skin. Repeated exposure may cause skin dryness or cracking. Eczema/contact dermatitis.

#### **Eye contact**

Irritation of eyes and mucous membranes.

#### **Acute and chronic health hazards**

This product may cause skin and eye irritation. Prolonged inhalation of high concentrations may damage respiratory system.

#### **Route of entry**

Inhalation Ingestion Skin absorption Skin and/or eye contact

#### **Target Organs**

Respiratory system, lungs Mucous membranes

## CILBOND 24

**Medical Symptoms** Symptoms following overexposure to vapor may include the following: Coughing, chest tightness, feeling of chest pressure. Difficulty in breathing. Dizziness. Symptoms following overexposure may include the following: Dry skin.

### 12. Ecological Information

**Ecotoxicity** The product contains a substance which may cause long-term adverse effects in the aquatic environment.

#### Persistence and degradability

**Persistence and degradability** No data available.

#### Bioaccumulative potential

**Bio-Accumulative Potential** Not known.

#### Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

#### Other adverse effects

**Other adverse effects** Not known.

### 13. Disposal considerations

#### Waste treatment methods

**General information** The generation of waste should be minimized or avoided wherever possible. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

**Disposal methods** Dispose of contents/container in accordance with local regulations.

### 14. Transport information

**General** Wear protective clothing as described in Section 8 of this safety data sheet.

**Road transport notes** Avoid releasing into the environment.

**Sea transport notes** Do not release into the environment.

#### UN Number

**UN No. (DOT)** 1133

**UN No. (IMDG)** 1133

**UN No. (ICAO)** 1133

#### UN proper shipping name

**Proper shipping name (DOT)** ADHESIVES

**Proper shipping name (IMDG)** ADHESIVES

**Proper shipping name (ICAO)** ADHESIVES

#### Transport hazard class(es)

**IMDG Class** 3

**ICAO class/division** 3

**CILBOND 24****Transport labels****Packing group**

DOT pack group	II
IMDG packing group	II
ICAO packing group	II

**Environmental hazards****Environmentally Hazardous Substance**

No.

**Special precautions for user**

EmS F-E, S-D

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

**15. Regulatory information****16. Other information**

<b>Revision comments</b>	NOTE: Lines within the margin indicate significant changes from the previous revision. Revised classification. Change of Company Name
<b>Issued by</b>	HS&E Manager.
<b>Revision date</b>	10/7/2015
<b>Revision</b>	2
<b>Supersedes date</b>	9/22/2015
<b>SDS No.</b>	4663
<b>SDS status</b>	Approved.

## CILBOND 24

<b>Hazard statements in full</b>	H225 Highly flammable liquid and vapor. H226 Flammable liquid and vapor. H228 Flammable solid. H301 Toxic if swallowed. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H312 Harmful in contact with skin. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H331 Toxic if inhaled. H332 Harmful if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H351 Suspected of causing cancer. H361d Suspected of damaging the unborn child. H373 May cause damage to organs through prolonged or repeated exposure. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects. H413 May cause long lasting harmful effects to aquatic life.
<b>STIR</b>	STIR BEFORE USE

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.