

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 07.06.2017

Version number 4

Revision: 07.06.2017

SECTION 1: Identification of the substance/mixture and of the company/undertaking

· **1.1 Product identifier**

· **Trade name:** illbruck CT468

· **MSDS code:** A-I-CT468

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
Restricted to professional users.

· **Application of the substance / the mixture** Adhesives

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

tremco illbruck Productie B.V.
Vlietskade 1032, 4241 WC Arkel
T: +31 (0) 183568000, F: +31 (0) 183568100
msds@tremco-illbruck.com

· **Further information obtainable from:**

tremco illbruck Ltd
Coupland Road, Hindley Green, Wigan, WN2 4HT
T: +44 (0) 1942251400, F: +44 (0) 1942251410
www.tremco-illbruck.co.uk, uk.info@tremco-illbruck.com

· **1.4 Emergency telephone number:**

During office hours tel.: +44 (0) 1942251400. At all other times please contact your national poisoning centre.

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**

Flam. Liq. 2	H225	Highly flammable liquid and vapour.
Skin Irrit. 2	H315	Causes skin irritation.
Eye Irrit. 2	H319	Causes serious eye irritation.
Repr. 2	H361d	Suspected of damaging the unborn child.
STOT SE 3	H336	May cause drowsiness or dizziness.
STOT RE 2	H373	May cause damage to organs through prolonged or repeated exposure.
Aquatic Chronic 3	H412	Harmful to aquatic life with long lasting effects.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

· **Hazard pictograms**



GHS02 GHS07 GHS08

· **Signal word** Danger

· **Contains:**

toluene

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butanone

Hydrocarbons,C6-C7,n-alkanes,isoalkanes,cyclics,<5% n-hexane

- **Hazard statements**

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H361d Suspected of damaging the unborn child.

H336 May cause drowsiness or dizziness.

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

H412 Harmful to aquatic life with long lasting effects.

- **Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P260 Do not breathe vapours.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P273 Avoid release to the environment.

P202 Do not handle until all safety precautions have been read and understood.

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.

- **Supplemental information:**

Restricted to professional users.

- **2.3 Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**

- **Description:** Mixture of substances listed below with non-hazardous additions.

- **Dangerous components:**

CAS: 108-88-3 EINECS: 203-625-9 Reg.nr.: 01-2119471310-51-xxxx	toluene Flam. Liq. 2, H225; Repr. 2, H361d; STOT RE 2, H373; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336	50- <75%
CAS: 78-93-3 EINECS: 201-159-0 Reg.nr.: 01-2119457290-43-xxxx	butanone Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	20- <30%
EC number: 921-024-6 Reg.nr.: 01-2119475514-35-xxxx	Hydrocarbons,C6-C7,n-alkanes,isoalkanes,cyclics,<5% n-hexane Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; STOT SE 3, H336	10- <20%
CAS: 1314-13-2 EINECS: 215-222-5 Reg.nr.: 01-2119463881-32-xxxx	zinc oxide Aquatic Acute 1, H400; Aquatic Chronic 1, H410	0.1- <1%

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

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SECTION 4: First aid measures

· 4.1 Description of first aid measures

· **General information:** Take affected persons out of danger area and lay down.

· **After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

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

· **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** Do not induce vomiting; call for medical help immediately.

· 4.2 Most important symptoms and effects, both acute and delayed

Breathing difficulty

Headache

Dizziness

Nausea

Irritating to eyes and skin.

May cause damage to organs through prolonged or repeated exposure.

· **Information for doctor:** No further relevant information available.

· **Hazards** No further relevant information available.

· 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

· 5.1 Extinguishing media

· **Suitable extinguishing agents:**

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Use fire extinguishing methods suitable to surrounding conditions.

· **For safety reasons unsuitable extinguishing agents:** Water with full jet

· 5.2 Special hazards arising from the substance or mixture

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

Carbon monoxide (CO)

Carbon dioxide

Hydrogen chloride (HCl)

· 5.3 Advice for firefighters

· **Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

· **Additional information**

Cool endangered receptacles with water spray.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

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Keep people at a distance and stay on the windward side.

Ensure adequate ventilation

Keep away from ignition sources.

· **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

· **6.3 Methods and material for containment and cleaning up:**

Ensure adequate ventilation.

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

· **6.4 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.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

Do not breathe vapour.

Avoid contact with the eyes and skin.

Pregnant women should strictly avoid inhalation or skin contact.

· **Information about fire - and explosion protection:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Fumes can combine with air to form an explosive mixture.

Use explosion-proof apparatus / fittings and spark-proof tools.

· **7.2 Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **Requirements to be met by storerooms and receptacles:**

Store in a cool location.

Store only in unopened original receptacles.

· **Information about storage in one common storage facility:**

Store away from oxidising agents.

Protect from heat and direct sunlight.

· **Further information about storage conditions:**

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

Storage temperature: +10 °C to +21 °C

· **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

108-88-3 toluene

WEL	Short-term value: 384 mg/m ³ , 100 ppm
	Long-term value: 191 mg/m ³ , 50 ppm
	Sk

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78-93-3 butanone

WEL	Short-term value: 899 mg/m ³ , 300 ppm Long-term value: 600 mg/m ³ , 200 ppm Sk, BMGV
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- **Ingredients with biological limit values:**

78-93-3 butanone

BMGV	70 µmol/L Medium: urine Sampling time: post shift Parameter: butan-2-one
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- **Additional information:**

The lists valid during the making were used as basis.
EH40/2005 Workplace Exposure Limits (2nd edition, 2011)

- **8.2 Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Do not breathe vapour.
Avoid contact with the eyes and skin.
Use skin protection cream for skin protection.
Pregnant women should strictly avoid inhalation or skin contact.

- **Respiratory protection:**

Use only in well-ventilated areas.
Take note of emission threshold.
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
Filter A2/P3

- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

- **Material of gloves**

Nitrile rubber, NBR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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- **Eye protection:**



Tightly sealed goggles

- **Body protection:** Protective work clothing

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form: Viscous

Colour: Amber coloured

- **Odour:** Like aromatic solvents

- **Initial boiling point and boiling range:** Undetermined.

- **Flash point:** -10 °C

- **Explosive properties:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

- **Explosion limits:**

Lower: 0.9 Vol %

Upper: 11.5 Vol %

- **Density at 20 °C:** 0.89 g/cm³

- **Solubility in / Miscibility with water:**

Insoluble.

- **Viscosity:**

Dynamic at 20 °C: 5000 - 6000 cps

- **Solvent content:**

VOC (EU) 675 g/l

- **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** Stable

- **10.2 Chemical stability**

- **Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

- **10.3 Possibility of hazardous reactions**

Reacts with strong oxidising agents.

Reacts with reducing agents.

- **10.4 Conditions to avoid**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

- **10.5 Incompatible materials:**

PVC

Polystyrene

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- **10.6 Hazardous decomposition products:**

Carbon monoxide and carbon dioxide
Nitrogen oxides

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**

- **Acute toxicity** Based on available data, the classification criteria are not met.

- **LD/LC50 values relevant for classification:**

108-88-3 toluene

Oral	LD50	4328 mg/kg (rat)
Dermal	LD50	6000 mg/kg (rabbit)
Inhalative	LC50/4 h	21 mg/L (rat)

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Oral	LD50	5000 mg/kg (rat)
Dermal	LD50	2000 mg/kg (rabbit)

1314-13-2 zinc oxide

Oral	LD50	> 5000 mg/kg (rat)
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- **Primary irritant effect:**

- **Skin corrosion/irritation**

Strong degreasing effect.

Causes skin irritation.

- **Serious eye damage/irritation**

Causes serious eye irritation.

- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

- **Additional toxicological information:**

Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Harmful: may cause lung damage if swallowed.

Inhalation of concentrated vapours as well as oral intake will lead to anaesthesia-like conditions and headache, dizziness, etc.

- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

CAS 108-88-3; Repr. 2 (CLP)

- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.

- **Carcinogenicity** Based on available data, the classification criteria are not met.

- **Reproductive toxicity**

Suspected of damaging the unborn child.

- **STOT-single exposure**

May cause drowsiness or dizziness.

- **STOT-repeated exposure**

May cause damage to organs through prolonged or repeated exposure.

- **Aspiration hazard** Based on available data, the classification criteria are not met.

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SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

108-88-3 toluene

LC50/96 h	24 mg/L (rainbow trout)
	13 mg/L (carassius auratus)
EC50/48 h	11.5 mg/L (daphnia magna)

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

LC50/96 h	1-10 mg/L (fish)
EC50	1-10 mg/L (bacterium)
NOEC/21 d	1-10 mg/L (fish)

1314-13-2 zinc oxide

LC50/96 h	1.1 mg/L (fish)
EC50/48 h	>1000 mg/L (daphnia magna)

- **12.2 Persistence and degradability** The product is not easily, but potentially biodegradable.
- **12.3 Bioaccumulative potential** Low potential for accumulating in organisms
- **12.4 Mobility in soil** No further relevant information available.

· Ecotoxicological effects:

108-88-3 toluene

IC50/72 h	12 mg/L (selenstrum capricornutum)
NOEC	29 mg/L (bacterium)

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

IC50/72 h	10-100 mg/L (algae)
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1314-13-2 zinc oxide

IC50/72 h	0.1-1 mg/L (algae)
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- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:**
The material is harmful to the environment.
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

· Recommendation

Disposal must be made according to official regulations.
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

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- **Waste disposal key:** UK (WM3) : HP3 HP4 HP5 HP10 HP14

- **European waste catalogue**

08 04 09*	waste adhesives and sealants containing organic solvents or other hazardous substances
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- **Uncleaned packaging:**

- **Recommendation:**

Dispose of packaging according to regulations on the disposal of packagings.

Packagings that may not be cleansed are to be disposed of in the same manner as the product.

Non contaminated packagings may be recycled.

SECTION 14: Transport information

- **14.1 UN-Number**

- **ADR, IMDG, IATA**

UN1133

- **14.2 UN proper shipping name**

- **ADR**

1133 ADHESIVES

- **IMDG, IATA**

ADHESIVES

- **14.3 Transport hazard class(es)**

- **ADR**



- **Class**

3 (F1) Flammable liquids.

- **Label**

3

- **IMDG, IATA**



- **Class**

3 Flammable liquids.

- **Label**

3

- **14.4 Packing group**

- **ADR, IMDG, IATA**

II

- **14.5 Environmental hazards:**

- **Marine pollutant:**

No

- **14.6 Special precautions for user**

Warning: Flammable liquids.

- **Danger code (Kemler):**

33

- **EMS Number:**

F-E,S-D

- **Stowage Category**

B

- **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

Not applicable.

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· Transport/Additional information:
· ADR
· Limited quantities (LQ)

5L

· Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· Transport category

2

· Tunnel restriction code

D/E

· IMDG
· Limited quantities (LQ)

5L

· Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· UN "Model Regulation":

UN 1133 ADHESIVES, 3, II

SECTION 15: Regulatory information

· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

"CLP" Regulation (EC) No 1272/2008 (OJ L 353, 31.12.2008, p.1).

"REACH" Regulation (EC) No 1907/2006 (OJ L 396, 30.12.2006, p.1, with subsequent amendments).

COMMISSION REGULATION (EU) 2015/830 of 28 May 2015.

· REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 48

· National regulations:
· Information about limitation of use:

Employment restrictions concerning juveniles must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

· Other regulations, limitations and prohibitive regulations

"REACH" Regulation (EC) No 1907/2006; ANNEX XVII - RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, PREPARATIONS AND ARTICLES

· Substances of very high concern (SVHC) according to REACH, Article 57 Not applicable.

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

SECTION 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.

· Relevant phrases

H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H361d Suspected of damaging the unborn child.

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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.

· **Abbreviations and acronyms:**

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

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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

Flam. Liq. 2: Flammable liquids – Category 2

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Repr. 2: Reproductive toxicity – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

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

Asp. Tox. 1: Aspiration hazard – Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

· *** Data compared to the previous version altered.**