

Kingspan **KoolDuct** Adhesive

SAFETY DATA SHEET (SDS)

1. Identification of the Substance / Preparation & of the Company

Identification of the Substance or Preparation

Product Name: Kingspan KoolDuct Adhesive
AKA: Special Adhesive for Phenolic Ducting /
 PRESSION TERMOCOL LP

Use of the Substance or Preparation

Intended Use: Brush adhesive for the assembly of
 ductwork fabricated Kingspan KoolDuct
 System

Chemical Group

Group: Polichloroprene Adhesive

Company Identification

Sold by: Kingspan Insulation Ltd,
 Pembridge, Leominster, Herefordshire
 HR6 9LA, UK
 Tel: +44 (0) 1544 388 601
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 Email: info.uk@insulation.kingspan.com

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2. Hazards Identification

In accordance with 67/548/CE – 92/32/CE – 2004/73/CE
 XXIX ATP and 88/379/CEE – 1999/45-CE- 2001/60/CE.

Danger Symb: Xi (Irritant)
 F (Highly Flammable)
 N (Dangerous to the Environment)

R-Phrases: R11, R66, R67, R36/38, R51/53

Refer to Section 16 for a full explanation of R-Phrases.

- If exposed to an ignition source at a temperature below 21°C, the product can easily catch fire.
- If brought into contact with the eyes, the product can cause irritation that may last for over 24 hours.
- If brought into contact with the skin, the product may cause significant inflammation with erythema, scabs and oedema.
- The preparation contains solvents which easily vaporise the inhalation of which may cause anaesthetic effect with sleepiness and dizziness. Repeated contact of preparation with the skin may cause dryness and chapping.

- The preparation is toxic to aquatic organisms and may cause long term adverse effects to the aquatic environment.

For further information on health, the environment and disposal considerations see Sections 11 & 12.

3. Composition / Information on Ingredients

The following components are deemed hazardous with in the scope of EEC directive 67/548:

Ethyl Acetate (29-33%)

CAS: 141-78-6
EC: 205-500-4

Hazard Symbols: F, Xi

Risk (R) Phrases: R11, R36, R66, R67

Solvent Naphtha (25-29%) - Petroleum
 Hydrotreated light naphthenic (Section 11) – declassified product under app. Note P of Attachment 1. Benzene concentration <0.1% in weight.

CAS: 92062-15-2
EC: 295-529-9
Hazard Classification: F, Xi, N
R Phrase Classification: R11, R38, R51, R53, R66, R67

Butanone (16-19%)

CAS: 78-93-3
EC: 201-159-0
Hazard Classification: F, Xi
R Phrase Classification: R11, R36, R66, R67

Refer to Section 16 for a full explanation of R-Phrases.

4. First Aid Measures

Skin Contact

Remove all contaminated clothing immediately. All areas that have, or are suspected of having come into contact with the product, must be rinsed immediately with plenty of soap and running water.

Eye Contact

Seek immediate medical attention. Mechanically remove as much of the product as possible, then flush the affected eye area with plenty of fresh cold water for at least 15 minutes.

Ingestion

Seek a medical examination immediately and present this SDS. Do not induce vomiting. A suspension of activated charcoal in water, or liquid paraffin may be administered.

Inhalation

Ventilate the premises. Remove the affected person immediately from the contaminated premises and rest in a well ventilated area. Should the person feel unwell, seek immediate medical attention.

5. Fire Fighting Measures

Recommended Extinguishers

In case of fire use CO₂ extinguishers.

Non-Recommended Extinguishers

None. However, it is not advisable to use water jets to extinguish the fire.

Risks Arising from Combustion

Avoid inhalation of fumes. In case of fire, this preparation may produce toxic smoke (including Hydrochloric Acid gas). In case of combustion, resin contained in the preparation may produce dangerous derivatives (including formaldehyde and phenol by products).

Protective Equipment

Use protection for the respiratory tract (e.g. independent breathing apparatus) and protective eye equipment. It is possible to use nebulised water to cool fire exposed containers (as excessive heat may cause overpressure within the containers leading to possible explosion) and to protect staff during extinguishing operations.

6. Accidental Release Measures

Measures for Personal Safety

- Use gloves and protective clothing (Section 8).

Environmental Measures

- Stop and control accidental release with inert, non-combustible materials such as dust or Bentonite.
- Eliminate all unguarded flames and possible sources of ignition (such as smoking).
- If the product has been released into a water course, drainage system, or has contaminated the ground and vegetation, notify the competent authorities.

Cleaning Measures

- Rapidly recover the product. Do so wearing a mask and other protective clothing (Section 8).
- If the product is in liquid form, prevent it from entering the drainage system.
- If possible, recover the product for reuse, otherwise contain it for disposal.
- Where appropriate the product can be absorbed by an inert material.
- After the product has been recovered, rinse the area and the materials involved.

7. Handling & Storage

Handling Precautions

Avoid contact with the preparation and inhalation of the vapours (Section 8). Place the containers on the ground during use or whilst decanting. Guarantee equipotentiality by earth grounding. Wear antistatic shoes. Remember that the vaporising solvents are heavier than air and spread along the

ground so that may cause potentially dangerous areas. Do not eat or drink while working. Do not smoke while working.

Incompatible Materials

None in particular (Section 10).

Storage Conditions

Always keep the containers tightly closed. Avoid storing at temperatures less than 10°C. Keep away from unguarded flames, sparks and heat sources. Avoid direct exposure to sunlight. Avoid the accumulation of electrostatic charge.

Storage Premises

Storage premises should be kept cool. It is indispensable that adequate ventilation is provided to avoid the accumulation of vapour as possible leakage may cause fire or explosion.

8. Exposure Controls / Personnel Protection

Precautionary Measures

Adequate ventilation should be given to the premises where the product is stored and / or handled.

Respiratory Protection

Use adequate protective respiratory equipment, (e.g. a mask with cartridge filter for organic vapours – Type A ref. EN141). Always consult the respirator / mask supplier to obtain information on product life.

Hand Protection

Use protective gloves that provide comprehensive protection, (e.g. nitrilic rubber – ref. EN374). The suitability and life of the gloves must derive from their intended use – i.e. from the frequency and period of contact with the chemical substance, from their chemical resistance and from the thickness of the gloves and method of use. Always consult the glove supplier to obtain information on product life.

Eye Protection

Use close fitting safety goggles and / or a visor conforming to EN166.

Skin Protection

No special protection must be adopted for normal use. However, it is advisable to wear working clothes which cover all parts of the body.

Exposure Limits (ACGIH)

The Product

VLE 8h:	No data available
VLE Short:	No data available
TLV TWA 968 (calc) mg/m ³ :	No data available

Ethyl Acetate

VLE TWA:	400 ppm, 1440 mg/m ³
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Solvent Naphtha (Petroleum)

Hydrotreated light naphthenic (Section 11) – Declassed product under app. Note p of attachment 1.

Benzene Conc.:	<0.1% in weight.
VLE TWA:	288 ppm, 1000 mg/m ³

Butanone

VLE TWA:	200 ppm, 590 mg/m ³
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9. Physical & Chemical Properties

Colour:	Straw coloured
Appearance:	Liquid

Odour:	Characteristic
pH:	N/A
Melting Point:	Range: -86°C to -29°C (ref to solvents)
Boiling Point:	Range: 77°C to 84°C (ref to solvents)
Flash Point:	<21°C
Auto-ignition Temp:	>200 °C (ref to lower temperature solvent)
Explosive Properties:	Limits: Low 1.2% -up. 11.5% vol. (ref to solvents)
Oxidizing Properties:	1
Vapour Pressure:	78.1 mmHg (calculated) at 20°C
Relative Density:	0.89% ± 2.0
Viscosity:	See technical data sheet
Solubility in Water:	None
Vapour Density:	>1.0 kg/m ³ (ref air = 1.0)
VOC Contained:	78.0% ± 2.0

10. Stability & Reactivity

Conditions to Avoid

Avoid accumulation of static charge. Keep away from unguarded flame, sparks and heat sources. Avoid direct exposure to sunlight. Stable under normal conditions.

Substances to Avoid

Avoid contact with combustible materials. The product could catch fire.

Hazardous Decomposition Properties

None known up to now.

11. Toxicological Information

Means of Exposure

- Inhalation
- Skin / Eyes contact
- Ingestion

The concentration of each substance should be borne in mind in assessing the toxicological effects that derive from the preparation. Set out below is the toxicological information relating to the main substances in the preparation.

Ethyl Acetate

Acute Toxicity

LD50 (Rabbit) Oral:	4935 mg/kg
LC50/4hr (Rat) Inhalation:	1600 mg/l

In Case of Ingestion

May cause vomiting and nausea. Risk of chemical bronchopneumonia.

In Case of Contact with the Skin

Proves irritating to skin.

In Case of Contact with the Eyes

Proves irritating to eyes.

In Case of Inhalation

The vapours may cause narcotic effects and the depression of the central nervous system.

Solvent Naphtha - Petroleum

Hydrotreated light naphthenic (Section 11) – declassified product under app. Note P of Attachment 1. Benzene concentration <0.1% in weight.

Composition

n-hexane (<5%):	TLV TWA: 50 ppm, 176 mg/m ³
Heptane & Isomer (10-15%):	TLV TWA: 400 ppm, 1640 mg/m ³
Cyclohexane (70-80%):	TLV TWA: 100 ppm, 344.2 mg/m ³
Hexane mix of Isomer (10-15%)	TLV TWA: 500 ppm, 1760 mg/m ³ ; TLV STEL: 1000 ppm, 3500 mg/m ³

Ingestion

LD50 > 5000 mg/kg

Small quantities of liquid introduced into the respiratory system during ingestion or vomiting may cause bronchopneumonia or oedema.

Skin Contact

Low toxicity. Frequent contacts may degrease and dry the skin.

Eye Contact

Causes inconvenience but does not damage ocular tissue.

Inhalation

Under high exposure levels, the vapours are irritating for eyes and for the respiratory tract.

Butanone

Acute Toxicity

LD50 (Rat) Oral:	2737 mg/kg
LD50 (Rabbit) Skin:	13000 mg/kg

Inhalation

At high concentrations the vapours may cause headaches, somnolence, dizziness and possible loss of consciousness.

Skin Contact

Frequent and prolonged contact may degrease and dry the skin and may lead to dermatitis.

Eye Contact

Irritant. May cause ocular lesions.

Ingestion

Small quantities of the preparation introduced to the respiratory system during ingestion or vomiting may cause bronchopneumonia or oedema.

12. Ecological Information

Adopt sound working practices so that the product is not released into the environment. The concentration of each substance should be borne in mind in assessing the ecotoxicological effects deriving from the preparation on the environment.

Solvent Naphtha (25-29%) - Petroleum

Hydrotreated light naphthenic (Refer to Section 11) – declassified product under app. Note P of Attachment 1. Benzene concentration <0.1% in weight.

CAS:	92062-15-2
EC:	295-529-9
R51/R53:	Toxic to aquatic organisms – may cause long-term adverse effects in the aquatic environment.

Ecotoxicity: Expected to be toxic to aquatic organisms; may cause long term

Mobility:	adverse effects in the aquatic environment. Highly volatile and will partition rapidly to air. Not expected to partition to sediment or wastewater suspended solids.
Persistence:	Not expected to be readily biodegradable.
Bioaccumulation:	May have long term effects on aquatic organisms if exposed continuously.

Ethyl Acetate

Ecotoxicity:	Fish – LC50 (48 hr): 350 mg/l Daphnia Magna – LC50 (24hr): 734 mg/l.
Mobility:	Volatile, moderately soluble in water.
Persistence:	Soil – BOD5 0.293 gO2/g COD 1.54 gO2/g Water – easily biodegradable
Bioaccumulation:	n.c.

Butanone

Ecotoxicity:	Fish – Leuciscus Idus: LC50 (24 hr): >100 mg/l Daphnia Magna – EC50 (48hr): >100 mg/l.
Mobility:	Volatile and soluble in water.
Persistence:	Easily biodegradable – meets the 10 day criteria.
Bioaccumulation:	The product does not cause significant bioaccumulation.

13. Disposal Considerations

Recover if possible. If polluted, the preparation and its container must be considered as Special Waste and must be consigned to authorised draining plants by authorised carriers. The appropriate waste code from the European Waste Catalogue cannot be specified as it depends on the utiliser. Always comply with the local and national regulations of the authority having jurisdiction.

Council Directive 2004/12/CE: When applicable refers to the following regulations 91/156/EEC, 91/689/EEC, 94/62/EEC and subsequent amendments.

14. Transport Information

Technical Name:	Adhesive
Road / Rail (ADR/RID):	Class 3
Air (ICAO/IATA):	Class 3
Sea (IMO):	Class 3
Packing Group:	II
EMS n°:	F-E . S –D
UN Number:	1 1 3 3
Label Pack:	3
Marine Pollutant:	No

15. Regulatory Information

Regulations & Directives

- Council Directive 67/548/EEC (Classification, packaging & labelling of dangerous substances) & subsequent amendments.
- Commission Directive 98/24/EC (Classification, Packaging and Labelling of Dangerous Preparations).
- Commission Directive 98/24/EC (Protection of the Health and Safety of Workers from the Risk Related to Chemical Agents).

- Commission Directive 2000/39/EC (Occupational Exposure Limit Values).
- Regulation (EC) No. 1907/2006 (REACH).

Symbols



R Phrases

R11:	Highly flammable.
R36/38:	Irritating to eyes and skin.
R51/53:	Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.
R66:	Repeated exposure may cause skin dryness or cracking.

S Phrases

S16:	Keep away from sources of ignition – no smoking.
S24/25:	Avoid contact with eyes and skin.
S29/56:	Do not empty into drains. Dispose of this material and its container at hazardous or special waste collection points.
S42:	In case of fire, use CO ₂ .

Contents

Rosin
May produce and allergic reaction.

16. Other Information

R Phrases

Text of R Phrases quoted in Sections 2 & 3.

R11:	Highly flammable
R36:	Irritating to the eyes
R38:	Irritating to the skin
R43:	May cause sensitization by skin contact
R51/53:	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65:	Harmful: may cause lung damage if swallowed.
R66:	Repeated exposure may cause skin dryness or cracking.
R67:	Vapours may cause drowsiness and Dizziness

The information supplied on this SDS is based on our current level of knowledge and on national and community regulations at the above specified date. The product must not be used for any purposes other than those specified under Section 1 without first obtaining written handling instructions. It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations. The information supplied on this SDS must be regarded as a description of the safety requirements relating to the product and not a guarantee of its properties.



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