

# Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : **KK Power Adhesive Express**

Revision Date : 31.03.2017

Version : 4.4 /en

**fischer**   
innovative solutions

Replaces version from : 01.12.2015

Print date : 05.04.2017

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

### **1.1 Product identifier**

Commercial Product Name           **KK Power Adhesive Express**

### **1.2 Relevant identified uses of the substance or mixture and uses advised against**

Relevant identified uses            adhesive

Recommended restrictions         None under normal processing. Observe technical data sheet.

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

Company designation               fischerwerke GmbH & Co. KG  
Klaus-Fischer-Straße 1  
D-72178 Waldachtal  
Telephone : +49(0)7443 12-0  
FAX : +49(0)7443 12-4222  
Email : info-sdb@fischer.de  
Internet : www.fischer.de

Marketer                               Great Britain: Mrs Mirka Valovicova, fischer Fixing (UK) Ltd, Hithercroft Road, Wallingford, Oxfordshire, OX10 9AT, Tel. 01491 827 920, Fax 01491 827 950

### **1.4 Emergency telephone number**

Emergency telephone number       +49(0)6132-84463 (24h)

## **SECTION 2: Hazards identification**

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

Classification according to Regulation (EC) No. 1272/2008   Skin Irrit. 2; H315 Eye Irrit. 2; H319 Resp. Sens. 1; H334 Skin Sens. 1; H317 Carc. 2; H351 STOT SE 3; H335 STOT RE 2; H373

### **2.2 Label elements**

Hazard pictogram



GHS07



GHS08

Signal word

Danger

Hazardous component(s) to be indicated on label

4 , 4'-methylenediphenyl diisocyanate , isomers and homologues , Reaktionsmasse aus 4 , 4'-Methylen-diphenyl-diisocyanat und o-(p-Isocyanatobenzyl)phenylisocyanat , 4 , 4'-methylenediphenyl diisocyanate , diphenylmethane-4 , 4'-diisocyanate

H-statement(s)

H315: Causes skin irritation.

# Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : **KK Power Adhesive Express**

Revision Date : 31.03.2017

Version : 4.4 /en



Replaces version from : 01.12.2015

Print date : 05.04.2017

P-statement(s)

H317: May cause an allergic skin reaction.  
H319: Causes serious eye irritation.  
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 .

P101: If medical advice is needed, have product container or label at hand.  
P102: Keep out of reach of children.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P260: Do not breathe dust/fume/gas/mist/vapours/spray.  
P304+P340: IF INHALED: 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.  
P405: Store locked up.  
P501: Dispose of contents/container to special waste treatment

Further information

EUH204: Contains isocyanates. May produce an allergic reaction.  
Persons already sensitised to diisocyanates may develop allergic reactions when using this product.  
Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product.  
This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.

## 2.3 Other hazards

Health hazard	None known.
Particular information pertaining specific risk for human / environment	None known.
Indication of danger	None known.
Hazard precautions	None known.

# Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : **KK Power Adhesive Express**

Revision Date : 31.03.2017

Version : 4.4 /en



Replaces version from : 01.12.2015

Print date : 05.04.2017

## SECTION 3: Composition/information on ingredients

### Hazardous ingredients

Ingredient		Classification (EC) 1272/2008	Concentration
4,4'-methylenediphenyl diisocyanate, isomers and homologues	CAS No. : 9016-87-9 REACH No. : The substance does not require registration according to Regulation (EC) No 1207/2006 [REACH].	Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Resp. Sens. 1; H334 Skin Sens. 1; H317 Carc. 2; H351 STOT SE 3; H335 STOT RE 2; H373	10.0 – 25.0 %
Reaktionsmasse aus 4,4'-Methylen-diphenyl-diisocyanat und o-(p-Isocyanatobenzyl)phenylisocyanat	EC-No. : 905-806-4 REACH No. : 01-2119457015-45	Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317 Resp. Sens. 1; H334 STOT SE 3; H335 Carc. 2; H351 STOT RE 2; H373	2.5 – 10.0 %
2,2'-dimorpholinyl-diethyl ether	CAS No. : 6425-39-4 EC-No. : 229-194-7	Skin Irrit. 2; H315 Eye Irrit. 2; H319	< 2.5 %
4,4'-methylenediphenyl diisocyanate, diphenylmethane-4,4'-diisocyanate	CAS No. : 101-68-8 EC-No. : 202-966-0 Index-No. : 615-005-00-9 REACH No. : 01-2119457014-47	Carc. 2; H351 Acute Tox. 4 ; H332 STOT RE 2 ; H373 Eye Irrit. 2; H319 STOT SE 3; H335 Skin Irrit. 2; H315 Resp. Sens. 1; H334 Skin Sens. 1; H317	< 2.5 %

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

General advice	If symptoms persist, call a physician. Remove/Take off immediately all contaminated clothing.
If inhaled	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
In case of skin contact	IF ON SKIN: Gently wash with plenty of soap and water.
In case of eye contact	In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
If swallowed	If swallowed, seek medical advice immediately and show this container or label. Clean mouth with water and drink afterwards plenty of water. Drink 1 or 2 glasses of water. Do NOT induce vomiting.
Notes to physician	No data available

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

Symptoms	No data available
----------	-------------------

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

Immediate medical attention	No data available
Special medical treatment	No data available

# Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : KK Power Adhesive Express

Revision Date : 31.03.2017

Version : 4.4 /en



Replaces version from : 01.12.2015

Print date : 05.04.2017

## **SECTION 5: Firefighting measures**

### **5.1 Extinguishing media**

Suitable extinguishing media      Carbon dioxide (CO2)  
Dry powder  
Foam  
Water spray jet

Extinguishing media which must not be used for safety reasons      High volume water jet

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

Special exposure hazards arising from the substance or preparation itself, its combustion products, or released gases      No hazards to be specially mentioned.

### **5.3 Advice for firefighters**

Special protective equipment for firefighting      In the event of fire, wear self-contained breathing apparatus.  
In the event of fire and/or explosion do not breathe fumes.

Additional information on firefighting      Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.  
Keep containers and surroundings cool with water spray. Container may rupture on heating.

## **SECTION 6: Accidental release measures**

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

Personal precautions      Ensure adequate ventilation, especially in confined areas.  
Keep people away from and upwind of spill/leak.

### **6.2 Environmental precautions**

Environmental precautions      The product should not be allowed to enter drains, water courses or the soil.  
Prevent spreading over a wide area (e.g. by containment or oil barriers).

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

Methods for cleaning up      Use mechanical handling equipment.  
Treat recovered material as described in the section "Disposal considerations".

### **6.4 Reference to other sections**

Reference to other sections      See chapter 7/8/13



# Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : **KK Power Adhesive Express**

Revision Date : 31.03.2017

Version : 4.4 /en

**fischer**   
innovative solutions

Replaces version from : 01.12.2015

Print date : 05.04.2017

Note : Choose body protection according to the amount and concentration of the dangerous substance at the work place.

General protective and hygiene measures Smoking, eating and drinking should be prohibited in the application area.  
Avoid contact with skin, eyes and clothing.  
Take off all contaminated clothing immediately.  
Wash hands before breaks and at the end of workday.  
Keep away from food, drink and animal feedingstuffs.  
Use protective skin cream before handling the product.

Information on environmental protection regulations No special environmental precautions required.

## **SECTION 9: Physical and chemical properties**

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

Form	paste
Colour	beige
Odour	characteristic
Odour threshold	not determined
pH	not applicable
Melting point [°C] / Freezing point [°C]	not determined
Boiling point [°C]	not determined
Flash point [°C]	111
Evaporation rate [kg/(s*m <sup>2</sup> )]	not applicable
Flammability (solid, gas)	Not applicable.
Explosion limits [Vol-%]	
Lower limit :	not determined
Upper limit :	not determined
Vapour pressure [kPa]	not determined
Vapour density	not determined
Density [g/cm <sup>3</sup> ]	1,5
Temperature :	20 °C
Relative density	not determined
Solubility	not determined
Partition coefficient n-octanol / water (log P O/W)	not determined

# Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : **KK Power Adhesive Express**

Revision Date : 31.03.2017

Version : 4.4 /en



Replaces version from : 01.12.2015

Print date : 05.04.2017

Autoignition temperature [°C]	not determined
Autoinflammability	not auto-flammable
Decomposition temperature [°C]	not determined
Viscosity, dynamic [kg/(m*s)]	not determined
Explosive properties	Not explosive
Risk of explosion.	Not explosive
Oxidising properties	No

## 9.2 Other information

Ignition temperature [°C]	not determined
Miscibility with water	immiscible

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Thermal decomposition	No decomposition if stored and applied as directed.
-----------------------	---

### 10.2 Chemical stability

Chemical stability	Stable under recommended storage conditions.
--------------------	--

### 10.3 Possibility of hazardous reactions

Hazardous reactions	No dangerous reaction known under conditions of normal use.
---------------------	---

### 10.4 Conditions to avoid

Conditions to avoid	No decomposition if used as directed.
---------------------	---------------------------------------

### 10.5 Incompatible materials

Materials to avoid	Not applicable.
--------------------	-----------------

### 10.6 Hazardous decomposition products

Hazardous decomposition products	No decomposition if used as directed.
----------------------------------	---------------------------------------

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Hazardous ingredients

##### 4,4'-methylenediphenyl diisocyanate, isomers and homologues

Oral toxicity [mg/kg]	Test criterion	Test species	Remarks	Source
> 5000	LD50	rat	OECD 423	100

Source : 100 – Company data

# Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : KK Power Adhesive Express

Revision Date : 31.03.2017

Version : 4.4 /en



Replaces version from : 01.12.2015

Print date : 05.04.2017

Dermal toxicity [mg/kg]	Test criterion	Test species	Source
> 5000	LD50	rabbit	100

Source : 100 – Company data

Inhalative toxicity [mg/l]	Test criterion	Exposure duration	Source
1,5	LC50	4 h	100

Source : 100 – Company data

Irritant effect on skin	Irritant
Irritant effect on eyes	irritating
Irritant effect on the respiratory tract	Irritant
Sensitization	Sensitising
Exposure type	Dermal
	Sensitising
Exposure type	Inhalation

## Reaktionsmasse aus 4, 4'-Methyldiphenyldiisocyanat und o-(p-Isocyanatobenzyl)phenylisocyanat

Oral toxicity [mg/kg]	Test criterion	Test species	Source
> 10000	LD50	rat	100

Source : 100 – Company data

Dermal toxicity [mg/kg]	Test criterion	Test species	Source
> 9400	LD50	rabbit	100

Source : 100 – Company data

Inhalative toxicity [mg/l]	Test criterion	Test species	Note	Exposure duration	Source
0,49	LC50	rat	Dust / mist	4 h	100

Source : 100 – Company data

Irritant effect on skin	Irritant
Measuring method	OECD Test Guideline 404
Test species	rabbit
Irritant effect on eyes	no data available
Sensitization	no data available
Carcinogenic effects	Carc. 2
Measuring method	OECD 453.
Test species	Rat.
Mutagenicity	negative



# Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : KK Power Adhesive Express

Revision Date : 31.03.2017

Version : 4.4 /en



Replaces version from : 01.12.2015

Print date : 05.04.2017

Measuring method OECD 453.

Reproduction toxicity No data available

Specific target organ toxicity (single exposure) [mg/kg]	Remarks	Source
	No data available	100

Source : 100 – Company data

Specific target organ toxicity (repeated exposure) [mg/kg]	Remarks	Source
	No data available	100

Source : 100 – Company data

## diphenylmethane-4,4'-diisocyanate

Oral toxicity [mg/kg]	Test criterion	Test species	Source
> 2000	LD50	rat	100

Source : 100 – Company data

Dermal toxicity [mg/kg]	Test criterion	Test species	Remarks	Source
> 9400	LD50	rat	OECD 402	100

Source : 100 – Company data

Inhalative toxicity [mg/l]	Test criterion	Test species	Note	Exposure duration	Source
1,5	LC50	rat	OECD 403	4 h	100

Source : 100 – Company data

Irritant effect on skin Irritant

Measuring method OECD 404

Test species rabbit

Irritant effect on eyes Irritant

Irritant effect on the respiratory tract Irritant

Sensitization Sensitising

Exposure type Dermal

Sensitising

Exposure type Inhalation

## 11.2 Additional information

Other information (chapter 11.) There is no data available for this product.

# Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : KK Power Adhesive Express

Revision Date : 31.03.2017

Version : 4.4 /en

**fischer**   
innovative solutions

Replaces version from : 01.12.2015

Print date : 05.04.2017

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Hazardous ingredients

##### 4,4'-methylenediphenyl diisocyanate, isomers and homologues

Toxicity to fish [mg/l]	Test criterion	Test species	Measuring method	Exposure duration	Source
> 100	LC50	Brachydanio rerio (zebra fish)	OECD Test Guideline 203	96 h	100

Source : 100 – Company data

Toxicity to daphnia [mg/l]	Test criterion	Test species	Exposure duration	Measuring method	Source
> 1000	EC50	Daphnia magna (Water flea)	24 h	OECD Test Guideline 202	100

Source : 100 – Company data

Toxicity to algae [mg/l]	Test criterion	Test species	Exposure duration	Source
> 1640	ErC50:	Scenedesmus subspicatus	72 h	100

Source : 100 – Company data

NOEC (daphnia) [mg/l]	Test species	Measuring method	Exposure duration	Source
> 10	Daphnia magna (Big water flea).	OECD 202	21 d	100

Source : 100 – Company data

Biodegradability Not readily biodegradable.

Ready degradability

#### Reaktionsmasse aus 4, 4'-Methylendiphenyldiisocyanat und o-(p-Isocyanatobenzyl)phenylisocyanat

Toxicity to fish [mg/l]	Test criterion	Measuring method	Exposure duration	Source
> 1000	LC50	OECD Test Guideline 203	96 h	100

Source : 100 – Company data

Toxicity to daphnia [mg/l]	Test criterion	Test species	Exposure duration	Measuring method	Source
> 1000	EC50	Daphnia magna (Big water flea).	24 h	OECD Test Guideline 202	100

Source : 100 – Company data

Toxicity to algae [mg/l]	Remarks	Source
	No data available	100

Source : 100 – Company data

# Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : KK Power Adhesive Express

Revision Date : 31.03.2017

Version : 4.4 /en



Replaces version from : 01.12.2015

Print date : 05.04.2017

NOEC (daphnia) [mg/l]	Test criterion	Test species	Measuring method	Exposure duration	Source
> 10	NOEC	Daphnia magna (Big water flea).	OECD 211	21 d	100

Source : 100 – Company data

Biodegradability No data available

Bioaccumulation no data available

Mobility No data available

Results of PBT characteristics determination Not applicable.

## diphenylmethane-4,4'-diisocyanate

Toxicity to fish [mg/l]	Test criterion	Test species	Measuring method	Exposure duration	Source
> 1000	LC50	Brachydanio rerio (zebra fish)	OECD Test Guide-line 203	96 h	100

Source : 100 – Company data

Toxicity to daphnia [mg/l]	Test criterion	Test species	Exposure duration	Measuring method	Source
9,9	EC50	Daphnia magna (Water flea)	48 h	OECD Test Guide-line 202	100

Source : 100 – Company data

Toxicity to algae [mg/l]	Test criterion	Test species	Exposure duration	Measuring method	Source
> 1640	EC50	Desmodesmus subspicatus.	72 h	OECD Test Guide-line 201	100

Source : 100 – Company data

NOEC (daphnia) [mg/l]	Test criterion	Test species	Measuring method	Exposure duration	Source
> 10	NOEC	Daphnia magna (Big water flea).	OECD 202	21 d	100

Source : 100 – Company data

## 12.6 Other adverse effects

Further information on ecology No information on ecology is available.  
Should not be released into the environment.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Disposal considerations Disposal together with normal waste is not allowed. Special disposal required according to local regulations.

# Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : **KK Power Adhesive Express**

Revision Date : 31.03.2017

Version : 4.4 /en



Replaces version from : 01.12.2015

Print date : 05.04.2017

The product should not be allowed to enter drains, water courses or the soil.  
Empty remaining contents.

Waste Code                      080400 – wastes from MFSU of adhesives and sealants (including waterproofing products)  
   150100 – packaging (including separately collected municipal packaging waste)

Uncleaned empty packaging                      Dispose of as unused product.

## **SECTION 14: Transport information**

	<b>Land transport ADR/RID</b>	<b>Marine transport IMDG</b>	<b>Air transport ICAO/IATA</b>
14.1 UN-No	Not applicable.	Not applicable.	Not applicable.
14.2 Description of the goods	No dangerous good according to ADR	No dangerous good according to IMDG	No dangerous good according to IATA
14.2 UN proper shipping name		Non dangerous good	Non dangerous good
14.3 Transport hazard class(es)	Not applicable.	Not applicable.	Not applicable.
14.4 Packaging group	Not applicable.	Not applicable.	Not applicable.
14.5 Environmental hazards	Not applicable.	Not applicable.	Not applicable.
Danger releasing substance	Not applicable.	Not applicable.	Not applicable.

### **14.6 Special precautions for user**

Precautions                      not required under normal use

### **14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code**

Transport in bulk according to Annex II of MARPOL and the IBC Code                      not applicable

### **14.8 Additional information**

Other information (chapter 14.)                      Not dangerous goods in the meaning of ADR/RID, ADNR, IMDG-Code, ICAO/IATA-DGR

## **SECTION 15: Regulatory information**

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

VOC                      0 g/l

Restriction of occupation.                      ChemVerbotsV – Chemikalien-Verbotsverordnung/§ 4  
Persons already sensitised to diisocyanates may develop allergic reactions when using this product. Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product. This product should not be used under condi-

# Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : **KK Power Adhesive Express**

Revision Date : 31.03.2017

Version : 4.4 /en



Replaces version from : 01.12.2015

Print date : 05.04.2017

tions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.

-

Water Hazard Class (Ger.) 1

## 15.2 Chemical safety assessment

Safety assessment Not relevant. Chemical safety assessments for substances in this mixture were not carried out.

Additional regulations Not applicable.

## SECTION 16: Other information

Relevant H-phrases EUH204: Contains isocyanates. May produce an allergic reaction.  
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 .

Wording of the hazard classes Skin Irrit.: Skin irritation  
Eye Irrit.: Serious eye irritation  
Resp. Sens.: Respiratory sensitization  
Skin Sens.: Skin sensitization  
Carc.: Carcinogenicity  
STOT SE: Specific target organ toxicity – single exposure  
STOT RE: Specific target organ toxicity – repeated exposure  
Acute Tox.: Acute toxicity

Classification for mixtures and used evaluation method according to regulation (EC) 1272/2008 [CLP]

Classification	Evaluation
Skin Irrit. 2; H315	Calculated
Eye Irrit. 2; H319	Calculated
Resp. Sens. 1; H334	Calculated
Skin Sens. 1; H317	Calculated
Carc. 2; H351	Calculated
STOT SE 3; H335	Calculated
STOT RE 2; H373	Calculated

Recommended restrictions None under normal processing. Observe technical data sheet.

Modifications of the previous version are denoted with an asterisk (\*).

This information is provided in accordance with the current status of our knowledge and experience. The Safety Data Sheet describes products with a view to relevant safety requirements. This information does not constitute a warranty of properties, features or qualities.