

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010



Article No.: 20777
Print date 07.11.2015
Version 2.0

KIWODUR 1100 PowerGrip
Revision date 12.05.2015
Issue date 12.05.2015

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1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifiers

Article No. (manufacturer/supplier): 20777
Identification of the substance or mixture KIWODUR 1100 PowerGrip

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

Curing agent. Reserved for industrial and professional use.

1.3. Details of the supplier of the safety data sheet

supplier (manufacturer/importer/downstream user/distributor)

KISSEL + WOLF GmbH
In den Ziegelwiesen 6
69168 Wiesloch

Telephone: 49 6222 578-0
Telefax: 49 6222 578-100
E-mail: info@kiwo.de

Dept. responsible for information:

EHS Environment-Health-Safety
E-mail

ehs@kiwo.de

1.4. Emergency telephone number

Emergency telephone number +49 6222 578 219

2. Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

This mixture is classified as hazardous according to regulation (EC) No. 1272/2008 [CLP].

Flam. Liq. 2 / H225	flammable liquids	Highly flammable liquid and vapour.
Skin Irrit. 2 / H315	skin corrosion/irritation	Causes skin irritation.
Eye Irrit. 2 / H319	Serious eye damage/eye irritation	Causes serious eye irritation.
Resp. Sens. 1 / H334	respiratory or skin sensitisation	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin Sens. 1 / H317	respiratory or skin sensitisation	May cause an allergic skin reaction.
Carc. 2 / H351	Carcinogenicity	Suspected of causing cancer.
Repr. 1B / H360	Reproductive toxicity	May damage fertility or the unborn child.
STOT SE 3 / H335	Specific target organ toxicity (single exposure)	May cause respiratory irritation.
STOT SE 3 / H336	Specific target organ toxicity (single exposure)	May cause drowsiness or dizziness.
STOT RE 2 / H373	Specific target organ toxicity (repeated exposure)	May cause damage to organs through prolonged or repeated exposure.
Aquatic Chronic 3 / H412	Hazardous to the aquatic environment	Harmful to aquatic life with long lasting effects.

2.2. Label elements

The product is classified and labelled according to EC directives or corresponding national laws.

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms



Danger

Hazard statements

H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.
H360 May damage fertility or the unborn child.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.

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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.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 Do not breathe vapour.
P261 Avoid breathing vapours.
P280 Wear protective gloves and eye/face protection.
P284 In case of inadequate ventilation wear respiratory protection.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308 + P313 IF exposed or concerned: Get medical advice/attention.
P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P370 + P378 In case of fire: Use Extinguishing powder or sand to extinguish.
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P403 + P235 Store in a well-ventilated place. Keep cool.

contains:

diphenylmethanediisocyanate, isomeres and homologues
dibutyltindilaurate
ethyl acetate

Supplemental Hazard information (EU)

EUH204 Contains isocyanates. May produce an allergic reaction.

2.3. **Other hazards**

3. Composition / Information on ingredients

3.2. **Mixtures**

Product description / chemical characterization

Description Mixture of components, as listed below, with nonhazardous constituents

Hazardous ingredients

Classification according to Regulation (EC) No. 1272/2008 [CLP]

EC No.	REACH No.	Wt %
CAS No.	Chemical name	Remark
INDEX No.	classification:	
205-500-4	01-2119475103-46	
141-78-6	ethyl acetate	50 - 70
607-022-00-5	Flam. Liq. 2 H225 / Eye Irrit. 2 H319 / STOT SE 3 H336	
500-079-6		
9016-87-9	diphenylmethanediisocyanate, isomeres and homologues Acute Tox. 4 H332 / Skin Irrit. 2 H315 / Eye Irrit. 2 H319 / Skin Sens. 1 H317 / Resp. Sens. 1 H334 / Carc. 2 H351 / STOT RE 2 H373 / STOT SE 3 H335	35 - 50
201-039-8		
77-58-7	dibutyltindilaurate Skin Corr. 1B H314 / Skin Sens. 1 H317 / Muta. 2 H341 / Repr. 1B H360 / Aquatic Acute 1 H400 / STOT RE 1 H372 / STOT SE 1 H370 / Aquatic Chronic 1 H410	0,3 - 0,5

Additional information

Full text of classification: see section 16

4. First-aid measures

4.1. **Description of first aid measures**

General information

In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice. In case of irregular breathing or respiratory arrest provide artificial respiration.

Following skin contact

After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately.

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After eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

After ingestion

Seek medical advice immediately. Do NOT induce vomiting.

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

In all cases of doubt, or when symptoms persist, seek medical advice.

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

5. Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide Water mist Foam

Extinguishing media which must not be used for safety reasons:

strong water jet

5.2. Special hazards arising from the substance or mixture

Gases/vapours, toxic

5.3. Special protective equipment for firefighters:

Provide a conveniently located respiratory protective device.

Additional information

The danger areas must be delimited and identified using relevant warning and safety signs. Cool closed containers that are near the source of the fire. Do not allow water used to extinguish fire to enter drains, ground or waterways. Treat runoff as hazardous.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Keep away from sources of ignition. Ventilate affected area. Remove persons to safety. Do not breathe vapours. See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations. Provide good ventilation.

6.3. Methods and material for containment and cleaning up

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see chapter 13).

6.4. Reference to other sections

Observe protective provisions (see chapter 7 and 8).

7. Handling and storage

7.1. Precautions for safe handling

Advices on safe handling

Avoid formation of flammable and explosive vapour concentrations in the air and exceeding the exposure limit values. Only use the material in places where open light, fire and other flammable sources can be kept away. Product may become electrostatically charged. When transferring, earthed pipework shall be used exclusively. Anti-static clothing including shoes are recommended. Use only spark proof tools. Avoid contact with skin and eyes. Do not inhale vapours or mist.

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

Personal protection equipment: refer to chapter 8.

Follow the legal protection and safety regulations.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep container tightly closed in a cool, well-ventilated place.

Requirements for storage rooms and vessels

Always keep in containers that correspond to the material of the original container. Ensure adequate ventilation of the storage area.

Hints on joint storage

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Keep away from strongly acidic and alkaline materials as well as oxidizers.

Additional information

VCI-storage class, see Chapter 15

7.3. **Specific end use(s)**

Observe technical data sheet. Observe instructions for use.

8. Exposure controls / Personal protection

8.1. **Control parameters**

Occupational exposure limit values:

ethyl acetate

INDEX No. 607-022-00-5 / EC No. 205-500-4 / CAS No. 141-78-6

TRGS 900, AGW, TWA: 1500 mg/m³; 400 ppm

TRGS 900, AGW, STEL: 3000 mg/m³; 800 ppm

diphenylmethanediisocyanate, isomeres and homologues

EC No. 500-079-6 / CAS No. 9016-87-9

TRGS 900, TWA: 0,05 mg/m³

TRGS 900, STEL: 0,05 mg/m³

TRGS 900, Ceiling: 0,1 mg/m³

Additional information

TWA : long-term occupational exposure limit value

STEL : short-term occupational exposure limit value

Ceiling : peak limitation

DNEL:

ethyl acetate

INDEX No. 607-022-00-5 / EC No. 205-500-4 / CAS No. 141-78-6

DNEL long-term dermal (local), Workers: 63 mg/kg

DNEL acute inhalative (local), Workers: 1468 mg/m³

DNEL acute inhalative (systemic), Workers: 1468 mg/m³

DNEL long-term inhalative (local), Workers: 734 mg/m³

DNEL long-term inhalative (systemic), Workers: 734 mg/m³

diphenylmethanediisocyanate, isomeres and homologues

EC No. 500-079-6 / CAS No. 9016-87-9

DNEL acute dermal, short-term (local), Workers: 28,7 mg/kg

DNEL acute dermal, short-term (systemic), Workers: 50 mg/kg

DNEL acute inhalative (local), Workers: 0,1 mg/m³

DNEL acute inhalative (systemic), Workers: 0,1 mg/m³

DNEL long-term inhalative (systemic), Workers: 0,05 mg/m³

PNEC:

ethyl acetate

INDEX No. 607-022-00-5 / EC No. 205-500-4 / CAS No. 141-78-6

PNEC aquatic, freshwater: 0,24 mg/L

PNEC aquatic, marine water: 0,024 mg/L

PNEC aquatic, intermittent release: 1,65 mg/L

PNEC sediment, freshwater: 0,24 mg/kg

PNEC sediment, marine water: 0,015 mg/kg

PNEC, Soil: 0,148 mg/kg

PNEC sewage treatment plant (STP): 650 mg/L

diphenylmethanediisocyanate, isomeres and homologues

EC No. 500-079-6 / CAS No. 9016-87-9

PNEC aquatic, freshwater: 1 mg/L

PNEC aquatic, marine water: 0,1 mg/L

PNEC, Soil: 1 mg/kg

8.2. **Exposure controls**

Provide good ventilation. This can be achieved with local or room suction. If this should not be sufficient to keep aerosol and solvent vapour concentration below the exposure limit values, a suitable respiratory protection must be used.

Personal protection equipment

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Respiratory protection

If concentration of solvents is beyond the occupational exposure limit values, approved and suitable respiratory protection must be used. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

Hand protection

Chemical resistant protective gloves: DIN EN 374
Recommendation for contact by spatter: Protection Index 2
Permeation time >30 min., e.g. butyl rubber 0,4 mm
Recommendation for direct contact: Protection Index 6
Permeation time >480 min., e.g. nitrile rubber 0,4 mm

Eye protection

Wear closed protection glasses. DIN EN 166

Protective clothing

Wear antistatic clothing of natural fibers (cotton) or heat resistant synthetic fibers.

Protective measures

After contact clean skin thoroughly with water and soap or use appropriate cleanser.

Environmental exposure controls

Do not allow to enter into surface water or drains.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:

Physical state liquid
Colour depending on coloration
Odour typical

Safety relevant basis data

		Method	Remark
Flash point:	-4 °C	DIN 53213	
Ignition temperature in °C	460 °C		
Lower explosion limit	2,1 Vol-%		
Upper explosion limit	11,5 Vol-%		
Vapour pressure at 20 °C:	57,99 mbar		
Density at 20 °C:	1,02 g/cm ³		
Water solubility (g/L)	insoluble		
pH at 20 °C:	-		
Viscosity at 23 °C:	10 s 4 mm	DIN 53211	
Initial boiling point and boiling range	76 °C (101,3 kPa)		

9.2. Other information:

10. Stability and reactivity

10.1. Reactivity

10.2. Chemical stability

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to chapter 7.

10.3. Possibility of hazardous reactions

Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

10.4. Conditions to avoid

10.5. Incompatible materials

10.6. Hazardous decomposition products

Hazardous decomposition byproducts may form with exposure to high temperatures, e.g.: carbon dioxide, carbon monoxide, smoke, nitrogen oxides.

11. Toxicological information

Classification for mixtures and used evaluation method according to regulation (EC) 1207/2008 [CLP]
No data on preparation itself available.

11.1. Information on toxicological effects

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Acute toxicity

ethyl acetate
oral, LD50, Rat: 5600 mg/kg
dermal, LD50, Rabbit: 18000 mg/kg

skin corrosion/irritation; Serious eye damage/eye irritation

Toxicological data are not available.

Respiratory or skin sensitisation

Toxicological data are not available.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Toxicological data are not available.

Specific target organ toxicity

Toxicological data are not available.

Aspiration hazard

Toxicological data are not available.

Practical experience/human evidence

Other observations:

Prolonged or repeated contact with the preparation can lead to irritations of mucous membranes and of skin such as redness, formation of blebs, dermatitis, etc..In case of inhalation dizziness, Nausea Inhalation causes narcotic effects/intoxication.Solvents may cause some of the aforementioned effects through skin resorption. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and/or absorption through skin. Splashing may cause eye irritation and reversible damage.

Overall Assessment on CMR properties

EC No. CAS No.	Chemical name	Classification according to Regulation (EC) No. 1272/2008 [CLP]
201-039-8 77-58-7	dibutyltindilaurate	Repr. 1B

Remark

There is no information available on the preparation itself .

12. Ecological information

overall evaluation

Classification for mixtures and used evaluation method according to regulation (EC) 1207/2008 [CLP]
Do not store at public landfills.

12.1. Toxicity

ethyl acetate
Fish toxicity, LC50, Pimephales promelas (fathead minnow): 230 mg/L (96 h)
Daphnia toxicity, EC50, Daphnia magna: 717 mg/L (48 h)
Algae toxicity, ErC50, Desmodesmus subspicatus.: 3300 mg/L

Long-term Ecotoxicity

Toxicological data are not available.

12.2. Persistence and degradability

Toxicological data are not available.

12.3. Bioaccumulative potential

Toxicological data are not available.

Bioconcentration factor (BCF)

Toxicological data are not available.

12.4. Mobility in soil

Toxicological data are not available.

12.5. Results of PBT assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects

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13. Disposal considerations

13.1. Waste treatment methods

Appropriate disposal / Product Recommendation

List of proposed waste codes/waste designations in accordance with EWC

080111 waste paint and varnish containing organic solvents or other dangerous substances

packaging

Recommendation

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

14. Transport information

14.1. UN number

1866

14.2. UN proper shipping name

Land transport (ADR/RID):	Resin solution
Sea transport (IMDG):	RESIN SOLUTION
Air transport (ICAO-TI / IATA-DGR):	Resin solution

14.3. Transport hazard class(es)

3

14.4. Packing group

II

14.5. Environmental hazards

Land transport (ADR/RID)	n.a.
Marine pollutant	n.a.

14.6. Special precautions for user

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.

Advices on safe handling: see parts 6 - 8

Additional information

Land transport (ADR/RID)

tunnel restriction code	D/E
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Sea transport (IMDG)

EmS-No.	F-E, S-E
Packaging >30 l	

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

not applicable

15. Regulatory information

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

EU legislation

VOC

VOC-value (in g/L): ISO 11890-2	595,259
VOC-value (in g/L): ASTM D 2369	595,259

Observe in addition any national regulations!

Restrictions of occupation

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Substance/product listed in the following inventories:

Listed in TOXIC SUBSTANCES CONTROL ACT (TSCA)

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15.2. Chemical Safety Assessment

Chemical safety assessments for substances in this preparation were not carried out.

16. Other information

Full text of classification in section 3:

Flam. Liq. 2 / H225	flammable liquids	Highly flammable liquid and vapour.
Eye Irrit. 2 / H319	Serious eye damage/eye irritation	Causes serious eye irritation.
STOT SE 3 / H336	Specific target organ toxicity (single exposure)	May cause drowsiness or dizziness.
Acute Tox. 4 / H332	Acute toxicity (inhalative)	Harmful if inhaled.
Skin Irrit. 2 / H315	skin corrosion/irritation	Causes skin irritation.
Skin Sens. 1 / H317	respiratory or skin sensitisation	May cause an allergic skin reaction.
Resp. Sens. 1 / H334	respiratory or skin sensitisation	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Carc. 2 / H351	Carcinogenicity	Suspected of causing cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
STOT RE 2 / H373	Specific target organ toxicity (repeated exposure)	May cause damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
STOT SE 3 / H335	Specific target organ toxicity (single exposure)	May cause respiratory irritation.
Skin Corr. 1B / H314	skin corrosion/irritation	Causes severe skin burns and eye damage.
Muta. 2 / H341	Germ cell mutagenicity	Suspected of causing genetic defects (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
Repr. 1B / H360	Reproductive toxicity	May damage fertility or the unborn child (state specific effect if known) (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
Aquatic Acute 1 / H400	Hazardous to the aquatic environment	Very toxic to aquatic life.
STOT RE 1 / H372	Specific target organ toxicity (repeated exposure)	Causes damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
STOT SE 1 / H370	Specific target organ toxicity (single exposure)	Causes damage to organs (or state all organs affected, if known) (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
Aquatic Chronic 1 / H410	Hazardous to the aquatic environment	Very toxic to aquatic life with long lasting effects.

Additional information

Classification for mixtures and used evaluation method according to regulation (EC) 1207/2008 [CLP]

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations. Without written approval, the product must not be used for purposes different from those mentioned in chapter 1. It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations. The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.