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Activator, Glass-/Metal Bonding Kit

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

1.1 Product identifier

Trade name/designation:

Activator, Glass-/Metal Bonding Kit

Other means of identification:

UFI: 4S00-R015-K002-SEKW

Article No.: GMK-300-A

1.2 Relevant identified uses of the substance or mixture and uses advised against Use of the substance/mixture:

Adhesive (2-Component adhesive). Restricted to professional users.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

ProGlass GmbH

Michael-Becker-Str. 2

73235 Weilheim an der Teck

GERMANY

Telephone: +49 7023 90013-0
Telefax: +49 7023 90013-23
E-mail: info@proglass.de
Website: www.proglass.de

E-mail (competent person): info@proglass.de

1.4 Emergency phone number

24h: +49 551 19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Hazard classes and hazard categories	Hazard statements	Classification procedure
Flammable liquids (Flam. Liq. 2)	H225: Highly flammable liquid and vapour.	Test data
STOT-single exposure (STOT SE 3)	H336: May cause drowsiness or dizziness.	Calculation
Serious eye damage/eye irritation (Eye Irrit. 2)	H319: Causes serious eye irritation.	Calculation

2.2 Label elements

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





GHS02 Flame GHS07
Exclamation mark

Signal word: Danger

Hazard components for labelling:

Acetone

Hazard statements for physical hazards	
H225 Highly flammable liquid and vapour.	

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Hazard statements for health hazards		
H319	Causes serious eye irritation.	
H336	May cause drowsiness or dizziness.	

Supplemental hazard information		
EUH066	Repeated exposure may cause skin dryness or cracking.	

Precautionary statements - Prevention			
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smo- king.		
P243	Take action to prevent static discharges.		
P280	Wear protective gloves and eye/face protection.		

Precautionary statements - Response			
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.		
P337+P313	If eye irritation persists: Get medical advice/attention.		

Precautionary statements - Disposal		
P501	Dispose of contents/container to an appropriate recycling or disposal facility.	

2.3 Other hazards

Adverse environmental effects:

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

SECTION 3: Composition / information on ingredients

3.2 Mixtures

Additional information:

The product does not contain substances of very high concern (SVHC) \geq 0,1 %.

Ingredients:

Product identifiers	Substance name Classification according to Regulation (EC) No. 1272/2008 [CLP]	Content
CAS No.: 67-64-1 EC No.: 200-662-2 REACH No.: 01-2119471330-49	Acetone Eye Irrit. 2, Flam. Liq. 2, STOT SE 3 Danger H225-H319-H336-EUH066	> 60 - 85 weight-%
CAS No.: 34562-31-7 EC No.: 252-091-3	3,5-Diethyl-1,2-dihydro-1-phenyl-2-propylpyridine Acute Tox. 4, Aquatic Chronic 4, Eye Irrit. 2, Skin Irrit. 2 Warning H312-H315-H319-H413	5 – 10 weight-%
CAS No.: 13395-16-9 EC No.: 236-477-9	copper(II) 4-oxopent-2-en-2-olate Aquatic Acute 1, Eye Irrit. 2, STOT SE 3, Skin Irrit. 2 Warning H315-H319-H335-H400 M-factor (acute): 100	< 5 weight-%

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove victim out of the danger area. Remove contaminated, saturated clothing immediately. If unconscious but breathing normally, place in recovery position and seek medical advice. Do not leave affected person unattended. Warning First aider: Pay attention to self-protection!

Following inhalation:

Provide fresh air. Get medical advice/attention if you feel unwell.

In case of skin contact:

Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.

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After eve contact:

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Following ingestion:

Rinse mouth. Let water be drunken in little sips. Do NOT induce vomiting. Get immediate medical advice/attention.

4.2 Most important symptoms and effects, both acute and delayed

Causes serious eye irritation. Causes skin irritation. May cause drowsiness or dizziness. If swallowed: Gastrointestinal complaints

4.3 Indication of any immediate medical attention and special treatment neededTreat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:

Water spray jet, alcohol resistant foam, extinguishing powder, carbon dioxide (CO2).

5.2 Special hazards arising from the substance or mixture

Highly flammable liquid and vapour. Vapours can form explosive mixtures with air. Heating causes rise in pressure with risk of bursting.

Hazardous combustion products:

In case of fire may be liberated: carbon monoxide (CO), carbon dioxide (CO₂), gases/vapours, toxic.

5.3 Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

5.4 Additional information

Use water spray jet to protect personnel and to cool endangered containers. Move undamaged containers from immediate hazard area if it can be done safely. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

Personal precautions:

Provide adequate ventilation. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with eyes and skin. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges. Remove persons to safety.

Protective equipment:

Wear protective gloves/protective clothing/eye protection/face protection. See section 8.

6.1.2 For emergency responders

Personal protection equipment:

Personal protection equipment: see section 8

6.2 Environmental precautions

Do not allow to enter into surface water or drains.

Do not allow to enter into soil/subsoil.

6.3 Methods and material for containment and cleaning up

For containment:

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

For cleaning up:

Clean floors and contaminated objects with: Water with tenside additive

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6.4 Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

6.5 Additional information

Use appropriate container to avoid environmental contamination.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures

Advices on safe handling:

Do not breathe gas/fumes/vapour/spray. Use only in well-ventilated areas. Avoid contact with skin, eyes and clothes. Repeated exposure may cause skin dryness or cracking. Wear personal protection equipment (refer to section 8).

Fire prevent measures:

Highly flammable liquid and vapour. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges. Provide earthing of containers, equipment, pumps and ventilation facilities. Use explosion-proof electrical equipment. Vapours can form explosive mixtures with air.

Environmental precautions:

Discharge into the environment must be avoided.

Advices on general occupational hygiene

Wash hands before breaks and after work. When using do not eat, drink or smoke. Take off contaminated clothing and wash it before reuse. Apply skin care products after work. Draw up and observe skin protection programme.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:

Keep container tightly closed. Store in a cool dry place. Keep away from heat.

Requirements for storage rooms and vessels:

Floors should be impervious, resistant to liquids and easy to clean. Keep/Store only in original container.

Hints on storage assembly:

Do not store together with: Oxidising agent, strong. Keep away from combustible material. Keep away from food, drink and animal feedingstuffs.

Further information on storage conditions:

Protect from sunlight.

7.3 Specific end use(s)

Recommendation:

Adhesive (2-Component adhesive).

Observe instructions for use.

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SECTION 8: Exposure controls / Personal protection

8.1 Control parameters

8.1.1 Occupational exposure limit values

Limit value type (country)	Substance name	 Long-term occupational exposure limit value Short-term occupational exposure limit value Instantaneous value Monitoring and observation processes Remark 	
IOELV (EU)	Acetone CAS No.: 67-64-1	① 500 ppm (1,210 mg/m³)	
WEL (GB)	Acetone CAS No.: 67-64-1	① 500 ppm (1,210 mg/m³) ② 1,500 ppm (3,620 mg/m³)	
WEL (GB)	copper(II) 4-oxopent-2-en-2- olate CAS No.: 13395-16-9	① 0.2 mg/m³ ⑤ (Smoke)	
WEL (GB)	copper(II) 4-oxopent-2-en-2- olate CAS No.: 13395-16-9	 1 mg/m³ 2 mg/m³ (Dusts and mist calculated as Cu) 	

8.1.2 Biological limit values

No data available.

8.1.3 DNEL-/PNEC-values

Substance name	DNEL value	① DNEL type	
		② Exposure route	
Acetone	1,210 mg/m ³	① DNEL worker	
CAS No.: 67-64-1		② Long-term – inhalation, systemic effects	
Acetone	200 mg/m ³	① DNEL consumer	
CAS No.: 67-64-1		② Long-term – inhalation, systemic effects	
Acetone	2,420 mg/m ³	① DNEL worker	
CAS No.: 67-64-1		② Acute - inhalation, systemic effects	
Acetone	186 mg/kg	① DNEL worker	
CAS No.: 67-64-1		② Long-term - dermal, systemic effects	
Acetone	62 mg/kg	① DNEL consumer	
CAS No.: 67-64-1		② Long-term - dermal, systemic effects	
Acetone	62 mg/kg	① DNEL consumer	
CAS No.: 67-64-1		② Long-term - oral, systemic effects	

Substance name	PNEC value	① PNEC type
Acetone CAS No.: 67-64-1	10.6 mg/L	① PNEC aquatic, freshwater
Acetone CAS No.: 67-64-1	1.06 mg/L	① PNEC aquatic, marine water
Acetone CAS No.: 67-64-1	100 mg/L	① PNEC sewage treatment plant
Acetone CAS No.: 67-64-1	30.4 mg/kg	① PNEC sediment, freshwater
Acetone CAS No.: 67-64-1	3.04 mg/kg	① PNEC sediment, marine water
Acetone CAS No.: 67-64-1	21 mg/L	① PNEC aquatic, intermittent release
Acetone CAS No.: 67-64-1	33.3 mg/kg	① PNEC soil, freshwater

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8.2 Exposure controls

8.2.1 Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment. Provide adequate ventilation. /- Technical ventilation of workplace.

8.2.2 Personal protection equipment







Eye/face protection:

Eye glasses with side protection (EN 166).

Skin protection:

Tested protective gloves must be worn (EN ISO 374).

Suitable material: IIR (Butyl rubber) Material thickness: ≥ 0,5 mm Breakthrough time:: ≥ 480 mm

The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. The exact breakthrough time must be requested from the protective glove manufacturer and must be observed. Check leak tightness/ impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Respiratory protection:

Usually no personal respirative protection necessary. If workplace limits are exceeded, a respiratory protection approved for this particular job must be worn. Suitable respiratory protection apparatus: Filter type AX.

Other protection measures:

Wear anti-static footwear and clothing

8.2.3 Environmental exposure controls

No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state: liquid Colour: light yellow

Odour: like Acetone

Safety relevant basic data

Parameter		at	Method	Remark
рН	6			
Melting point	not determined			
Freezing point	not determined			
Initial boiling point and boiling range	56 °C			
Decomposition temperature	not determined			
Flash point	-20 °C			
Evaporation rate	not determined			
Auto-ignition temperature	not determined			
Upper/lower flammability or explosive limits	2.3 - 14.3 Vol-%			Acetone
Vapour pressure	not determined			
Vapour density	2			
Density	0.8 g/ml	20 °C		
Bulk density	not applicable			
Water solubility	easily soluble	20 °C		
Partition coefficient: n-octanol/ water	not determined			
Dynamic viscosity	not determined			

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Parameter		at	Method	Remark
Kinematic viscosity	not determined			

9.2 Other information

No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

Highly flammable liquid and vapour.

10.2 Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3 Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4 Conditions to avoid

Heat, UV-radiation/sunlight.

10.5 Incompatible materials

Oxidising agent, strong

10.6 Hazardous decomposition products

No known hazardous decomposition products.

In case of fire may be liberated: carbon monoxide (CO), carbon dioxide (CO₂), gases/vapours, toxic.

Further information

No data available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

CAS No.	Substance name	Toxicological information
67-64-1	Acetone	LC ₅₀ Acute inhalation toxicity (vapour):
		76 mg/L 4 h (Rat)

Acute oral toxicity:

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

May be harmful if swallowed.

Acute dermal toxicity:

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

Acute inhalation toxicity:

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

Skin corrosion/irritation:

Based on available data, the classification criteria are not met. Prolonged or repeated skin contact may cause removal of natural fat from the skin resulting in dermatitis (skin inflammation).

Serious eye damage/irritation:

Causes serious eye irritation.

Respiratory or skin sensitisation:

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

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:

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

STOT-single exposure:

May cause drowsiness or dizziness.

STOT-repeated exposure:

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

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Aspiration hazard:

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

Additional information:

No data available.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

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

Additional ecotoxicological information:

No data available.

12.2 Persistence and degradability

Biodegradation:

No data available.

12.3 Bioaccumulative potential

Accumulation / Evaluation:

No indication of bioaccumulation potential.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

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

12.6 Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste treatment options

Appropriate disposal / Product:

Dispose of waste according to applicable legislation. Consult the appropriate local waste disposal expert about waste disposal.

Appropriate disposal / Package:

Dispose of waste according to applicable legislation. Completely emptied packages can be recycled.

Other disposal recommendations:

The allocation of waste code numbers / waste names must be carried out in accordance with the European Waste Catalogue (EWC). Collect in closed and suitable containers for disposal. Do not allow to enter into surface water or drains.

13.2 Additional information

Waste for disposal is to be classified and labelled.

SECTION 14: Transport information

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI-/IATA-DGR)
14.1 UN-No.			
1090	1090	1090	1090
14.2 UN proper shipping name			
ACETONE	ACETONE	ACETONE	ACETONE

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Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI-/IATA-DGR)
14.3 Transport ha	azard class(es)		
*	•	B	*
3	3	3	3
14.4 Packing gro	ир		<u>'</u>
I	II	II	II
14.5 Environment	tal hazards		
No	No	No	No
14.6 Special prec	autions for user		
No data available.			

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

not relevant

Additional information:

No data available.

SECTION 15: Regulatory information

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

15.1.1 EU legislation

Other EU regulations:

Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

15.1.2 National regulations

No data available.

15.2 Chemical Safety Assessment

No data available.

SECTION 16: Other information

16.1 Indication of changes

Changes executed in version 2.1:

Section 2, 3, 15: classification/Label elements

General revision

Changes executed in version 2.2:

Section 3: Composition / information on ingredients

Section 9: Physical and chemical properties

General revision

Changes executed in version 2.3:

Section 2, 3: classification/Label elements

General revision

Changes executed in version 2.4:

Section 1: UFI

Section 3: Hazardous ingredients

Section 9: Physical and chemical properties

General revision

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16.2 Abbreviations and acronyms

See overview table at www.euphrac.eu

16.3 Key literature references and sources for data

European Chemicals Agency (ECHA): http://www.echa.europa.eu

ECHA, C&L Inventory: http://echa.europa.eu/information-on-chemicals/cl-inventory-database ECHA, Registered substances: http://echa.europa.eu/information-on-chemicals/registered-substances GESTIS (Gefahrstoffinformationssystem der DGUV): http://www.dguv.de/ifa/GESTIS/index.jsp Hörath Gefährliche Stoffe und Gemische, 8. Auflage, Dr. Angela Schulz

Safety data sheets of the manufacturers

16.4 Classification for mixtures and used evaluation method according to regulation (EC) No. 1272/2008 [CLP]

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

Hazard classes and hazard categories	Hazard statements	Classification procedure
Flammable liquids (Flam. Liq. 2)	H225: Highly flammable liquid and vapour.	Test data
STOT-single exposure (STOT SE 3)	H336: May cause drowsiness or dizziness.	Calculation
Serious eye damage/eye irritation (Eye Irrit. 2)	H319: Causes serious eye irritation.	Calculation

16.5 Relevant H- and EUH-phrases

Hazard statements		
H225	Highly flammable liquid and vapour.	
H312	Harmful in contact with skin.	
H315	Causes skin irritation.	
H319	Causes serious eye irritation.	
H335	May cause respiratory irritation.	
H336	May cause drowsiness or dizziness.	
H400	Very toxic to aquatic life.	
H413	May cause long lasting harmful effects to aquatic life.	

Supplemental hazard information	
EUH066	Repeated exposure may cause skin dryness or cracking.

16.6 Training advice

No data available.

16.7 Additional information

The information in this safety data sheet has been established to our best knowledge and was upto-date at time of revision. The information is intended to give you advice about the safe handling of the product for storage, processing, transport and disposal. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.