

SAFETY DATA SHEET

according to ANSI Z400.5 the Global Harmonizing System, 29 CFR 1910.1200 (Hazard Communication Standard), and Regulation (EC) No 1907 / 2006 (REACH)

Version: 1.2 / EN

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Resist Strip A-20-B5

intelligent
fluid

1. Identification of the Preparation and Company

Product name

Resist Strip A-20-B5

Product use

Catch Cup Cleaning, Removal of Photoresists

Manufacturer

bubbles & beyond GmbH
Karl-Heine-Str. 99
D – 04229 Leipzig
Phone: +49(0)3 41 – 319 68 10
Telefax: +49(0)3 41 – 319 68 09
E-Mail: info@bubbles-beyond.de

Information contact

Dept. Research & Development (phone +49(0)3 41 – 319 68 10)

Emergency Phone

+49 (0)176 – 621 45 742 or +49 (0)176 – 621 45 743

2. Hazards Identification

Labelling according to Global Harmonizing System

Pictogram and signal word of the product:



Signal word: Warning

Hazard Statements:

H319 Causes serious eye irritation

Precautionary Statements:

P102 Keep out of reach of children.

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

P301+P330+P331 If swallowed: rinse mouth. Do NOT induce vomiting.

P302+P352 If on skin: Wash with plenty of soap and water.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

NOT for cosmetic use: Catch Cup Cleaning, Removal of Photoresists

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3. Composition / Information on Ingredients

Chemical classification

Water, alkyl ester, alcohols, surfactants

Hazardous ingredients

Name	EC No	CAS No	Amount
1-Methoxy-2-propanol	203-539-1	107-98-2	10..20%
Benzyl alcohol	202-859-9	100-51-6	5..10%
Alcohols ethoxylated	-	-	5..10%
Fatty coco alcohol sulphate-ammonium salt	292-758-6	90989-98-3	5..10 5%

4. General First Aid Measures

General advice

If symptoms persist, consult a physician (present safety data sheet if possible). No administration in cases of unconsciousness.

In case of inhalation

Move the affected person into fresh air. Keep the patient warm. In case of irregular breathing or respiratory arrest, give artificial respiration. In case of unconsciousness bring patient into stable side position and consult a physician.

In case of skin contact

Remove any clothing soiled by the product. In case of skin contact, wash off with soap and plenty of water. Do not use solvents or dilutions.

In case of eye contact

Remove contact lenses, keep eyelids open and rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

In case of ingestion

Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. If spontaneous vomiting occurs, keep the patients head low to prevent aspiration.

5. General Fire-fighting Measures

Suitable extinguishing media

Water (water mist), carbon dioxide (CO₂), fire extinguishing powder, alcohol resistant foam

Inappropriate extinguishing media

Full water jet

Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases:
In case of fire, carbon monoxide, carbon dioxide may arise. The inhalation of hazardous decomposition products may cause health problems.

Special protective equipment for fire-fighters

If necessary wear self-contained breathing apparatus for fire fighting

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6. General Accidental Release Measures

Personal precautions

Ensure adequate ventilation. Avoid contact with skin and eyes. Use personal protective equipment. See protective measures in Section 7 and 8.

Environmental precautions

Do not allow product to enter drains in large quantities. Inform respective authorities in case product reaches rivers, lakes or sewage systems.

Methods for cleaning up

Absorb large amounts with liquid-binding material (sand, silica universal binders), store in closed containers. Absorb small amounts with absorbent material (cloth, fleece). Treat the absorbed material according to Section 13, disposal. Finally clean contaminated surfaces and objects thoroughly with water.

7. General Handling and Storage

Safe handling

Avoid prolonged contact with eyes and skin. Use only in adequately ventilated areas. Wear protective clothing. Do not smoke, eat or drink while working. Keep in original container and keep container tightly closed when product is not in use.

Information about fire- and explosion protection

Product is not inflammable nor explosive. Vapours are heavier than air and may form explosive mixtures with air. Use the product only in areas where open fire and other sources of ignition are kept away.

Storage information

Store at: 10- 35 °C. Protect from freezing. Protect against heat.

Requirements for storage rooms and vessels

Store in original container only. Follow the instructions on the label. Do not expose to heat and direct sunlight. Keep container tightly closed when not in use. Store in a cool and well-ventilated location. Do not expose to oxidizing agents and strongly acid or alkaline materials.

Specific use

Catch Cup Cleaning, Removal of Photoresists

8. General Exposure Controls / General Personal Protection within Industrial Handling

Air limit values or biological limit values

not applicable

Limits for occupational exposure and/or biological limit values

Ensure good ventilation.

Personal protective equipment – Respiratory protection

In well ventilated areas no personal respiratory protection is needed.

Hand protection

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Handle with gloves recommended, e.g. solvent resistant glove certified according to EN 374, like nitrile rubber, neoprene; Material thickness > 0,4 mm; Break through time > 480 minutes.
Unsuitable material: PVC (polyvinylchloride), PVA (polyvinylalcohol). The protective glove should be tested on its workplace suitability (e.g. mechanical resistance, product compatibility, antistatic).

Eye protection

If tools and supplies are used that may cause a splashing of the product, adequate eye protection should be provided. Wear tight-fitting protective goggles with side protection.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. Physical and Chemical Properties

Appearance

Physical state:	liquid
Colour:	colourless to slightly yellowish
Odour:	fruity

Safety relevant basic data

Explosive hazard:	Product is not explosive. Avoid formation of explosive vapour/air mixtures.
pH (20 °C):	5,5 – 6,5 (dermatological pH; "skin neutral")
Melting point/range:	<-10 °C
Boiling point:	approx. 95 °C
Flash point:	> 61 °C (ISO 13736)
Ignition temperature:	Not applicable
Vapour pressure (20 °C):	Not determined
Vapour pressure (50 °C):	Not determined
Density (20 °C):	1.1 -1.2 g/cm ³
Water solubility (20 °C in g/l):	Emulsification
Lower explosion limit :	Not determined
Upper explosion limit :	Not determined
Flow time (DIN 53211):	52..55 s

10. Stability and reactivity

Storage stability

Stable under recommended storage conditions.

Conditions to avoid

Stable under recommended storage and handling conditions (see section 7).

Substances to avoid

Keep away from highly acid or alkaline substances as well as oxidizing agents to avoid exothermic reactions.

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Hazardous decomposition products

At high temperatures, hazardous decomposition products like carbon monoxide, carbon dioxide and nitrous gases may arise.

11. Toxicological information

The categorization has been made according to the method of calculation of the CLP-regulation for the pure substances. The product as such has not been tested. According to the producers experiences no hazards other than categorized have to be expected.

Concentrations below SCL-values (specific concentration limit) represent a lower class of hazard statements on basis of suppliers test results and/or information.

Measurement of single ingredients

1-Methoxy-2-propanol	H226: Flamm. liquid, Cat.3 LD50 oral (rat): > 5000 mg/kg LD50 dermal (rabbit): 11000 mg/kg
Benzyl alcohol	H302: Acut. Tox., Cat.4 H332: Acut. Tox., Cat.4 LD50 oral (rat): 1230 mg/kg LD50 dermal (rabbit): 2000 mg/kg
alcohols ethoxylated	H319: Causes serious eye damage.; SCL (1): 10%; SCL(2): < 10%
Fatty coco alcohol sulphate, ammonium salt	H319, Cat. 2; SCL(1): 20%, SCL (2): 10% (10% < C <= 20%)

12. Ecological Information

Ecotoxicity

Water hazard class 1 (self-rating): weak water-endangering. Do not allow product to enter ground water, bodies of water or sewage systems undiluted or in large amounts.

Persistence and degradability

All ingredients of these formulation are readily biodegradable.

Biodegradation – sewage plant

CSB value: not determined

13. Disposal Considerations

Appropriate disposal

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

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Contaminated packaging

Contaminated packaging should be emptied at the best. After adequate cleaning it can be reused. Packaging that can not be cleaned adequately has to be disposed of according to regional rules and regulations.

Cleaned packaging

Packaging that has not been contaminated and has been cleaned adequately can be reused. Suggested cleaning agent: water.

14. Transport Information

Land transport ADR/RID and GGVS/GGVE:

No dangerous good within the meaning of this rule. (Product does not show self-sustained combustion.)

Sea transport IMDG/GGVSea:

No dangerous good within the meaning of this rule. (Product does not show self-sustained combustion.)

Air transport ICAO-TI and IATA-DGR:

No dangerous good within the meaning of this rule. (Product does not show self-sustained combustion.)

15. Regulatory information

EPA Regulation:

All components of this product are on the TSCA list.

EU Regulation

Chemical safety assessment

A chemical safety assessment has not been carried out.

National regulations (Germany)

The information of this safety data sheet does not absolve the user from its own consideration of the risks at work, which may

be claimed by other health and safety laws.

When using this product, the national health and job safety rules and regulations apply.

Water hazard class

WGK 1: weakly water-endangering

(self-rating according to VwVwS, appendix 4 No. 3)

Other regulations, restrictions and prohibition regulations

Chemikaliengesetz

Gefahrstoffverordnung (GefStoffV)

Arbeitsmedizinische Grundsätze G26 (Atemschutzgeräte)

Bekanntmachung 220 (Auslegungshilfe zur Verordnung (EG) Nr. 1907/2006 (REACH); Ausgabe September 2007)

TRGS 900 (Arbeitsplatzgrenzwerte; Ausgabe Januar 2006; zuletzt geändert Februar 2009)

16. Other Information

Hazard ratings:

HEALTH (NFPA): 1, HEALTH (HMIS): 1, FLAMMABILITY: 1, PHYSICAL HAZARD: 0

(Personal Protection Rating to be supplied by user based on use conditions.)

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This information is intended solely for the use of individuals trained in the NFPA & HMIS hazard rating systems.

Employee training

See Section 2 for Risk & Safety Statements. Employees should be made aware of all hazards of this material (as stated in this SDS) before handling it.

Other EC-Directives

Regulation 1999/45/EC, last modified by Regulation (EC) No 1907/2006 (REACH)
Regulation 67/548/EEC, last modified by Regulation 2009/2/EC (31. ATP).
Regulation (EC) No 1907/2006 (REACH), last modified by regulation (EC) Nr. 134/2009
Regulation (EC) No 1272/2008 (CLP)
Bekanntmachung 220

Data sources

<http://www.baua.de>, <http://www.hvbg.de>
<http://echa.europa.eu>
<https://ssl.gischem.de/gemischrechner/>

Responsibility

Laboratory: Dr. Dirk Schumann.

The data in this safety data sheet is based on data considered to be accurate as of the date of revision. The information presented should be used as a guideline for the safe handling, storage, processing, transport and disposal of the product presented in this safety data sheet. The details named are not transferable to other products. If the indicated product of this safety data sheet is mingled, mixed or processed with other materials the details of this safety data sheet can not be transferred. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.