

MATERIAL SAFETY DATA SHEET
according to Regulation (EC) No 1907 / 2006 (REACH)

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DWR 95 PLUS



01. Identification of the preparation and of the company

Product name

DWR 95 PLUS

Product use

print roll cleaner

Manufacturer

bubbles & beyond GmbH
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02. Hazards Identification

Classification

Classified as hazardous according to criteria of NOHSC:

HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.

Classification according to Regulation (EC) No 1272/2008, appendix VII

Irreversible effects on the eye Cat. 1, H318

Hazard information: Causes serious eye damage

Classification according to Regulation 67/548/EEC or Regulation 1999/45/EC

Xi – R 41

Hazard information: Risk of serious damage to eyes

Additional hazards to human health and the environment

None

03. Composition/ information on ingredients

Chemical classification

Detergents and organic compounds dissolved in water

Hazard ingredients

See next page

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Chemical name	EC No	CAS No	Amount	Classification according to Regulation (EC) No 1272/2008	Classification according to 67/548/EEC
ETHYL-3-OXOBUTYRATE	205-516-1	141-97-9	< 30 %	Serious eye damage / irritation Cat. 2; H319	Xi; R 36
4-HYDROXY-4-METHYLPENTAN-2-ONE	204-626-7	123-42-2	< 15 %	Serious eye damage / irritation Cat. 2; H319	Xi; R 36
2-PHENYLETHYL ALCOHOL	200-456-2	60-12-8	< 5 %	Acute toxicity dermal Cat. 4; H312 Serious eye damage / irritation Cat. 2; H319	Xn; R 21 - 36
Nonionic surfactants			< 15 %	Serious eye damage / irritation Cat. 2, H319	Xi; R 36
Anionic surfactants			< 5 %	Eye corrosive Cat.1; H318	Xi; R 41

(For full text of H- and R-phrases see section 15)

Substances with required EC limit value

None

04. 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.

05. Fire-fighting measures

Suitable extinguishing media

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

Unappropriate extinguishing media

Full water jet

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Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases

In case of fire, carbon monoxide, carbon dioxide or nitrous gases may arise. The inhalation of hazardous decomposition products may cause serious health problems.

Special protective equipment for fire-fighters

If necessary wear self-contained breathing apparatus for fire fighting

Additional information

Remove product from fire source and cool with water spray jet.
Do not allow water to enter sewage system.

06. 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. Inform respective authorities in case product reaches rivers, lakes or sewage systems.

Methods for cleaning up

Absorb large amounts with liquid-binding material (sand, kieselgur, 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.

07. Handling and storage

Safe handling

Avoid 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 self-extinguishing.
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.

Further information

Prevent formation of vapours.

Storage information

Store at: 10- 25°C, higher temperatures may cause vapours that may form explosive mixtures with air.
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.

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Specific use

Cleaning of print rolls

08. Exposure controls / Personal protection

Air limit values or biological limit values

4-HYDROXY-4-METHYLPENTAN-2-ONE; CAS No: 123-42-2

Specification: Australia. NOHSC - National Exposure Standards for Atmospheric Contaminants in the Occupational Environment

TWA: 50 ppm/ 238 mg/m³

Reference: ACGIH is the documentation source.

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.

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with gloves.

See to BG-rule „Regeln für den Einsatz von Schutzhandschuhen“. Suitable is a solvent resistant glove certified according to EN 374. To protect against the common substances of the product:

Nitril 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)

See to orders and information of the glove producer concerning the application, storage and maintenance as well as the renewal of the protective glove.

The protective glove has to be renewed in case of damage or erosion.

Prophylactic skin care (use of skin care products) is recommended. Contaminated skin should be cleaned thoroughly (See to skin care data sheet ZH 1/132). Avoid wearing the protective gloves longer than needed.

Eye protection

If tools and supplies are used that may cause a splashing of the product (e.g. roll, brush or a high pressure cleaner during the secondary cleaning process), adequate eye protection should be provided. Wear tight-fitting protective goggles with side protection.

Body protection

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

Hygiene measures

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

09. Physical and chemical properties

Appearance

Physical state: liquid

Colour: colorless, slightly opalescent

odour: fruity

Safety relevant basic data

Explosive hazard: Product is not explosive. However a formation of explosive vapor/air mixtures may occur

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pH (20°C):	5,5
Melting point/range:	Not determined
Boiling point:	Not determined
Flash point:	> 95°C
Ignition temperature:	450 °C
Vapor pressure (20 °C):	4,2 kPa
Density (23 °C):	1,0019 g/cm ³
Water solubility (20 °C):	Emulsification
Lower explosion limit :	Not determined
Upper explosion limit :	Not determined
Flow time:	Not determined

10. Stability and reactivity

Storage stability

Stable under recommended storage conditions.

Conditions to avoid

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

Materials to avoid

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

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 Preparations Directive number 1999/45/EC. The product as such has not been tested. According to the producers experiences no hazards other than categorized have to be expected.

Measurement of ingredients

4-HYDROXY-4-METHYLPENTAN-2-ONE

LD50 oral (rat): 4000 mg/kg

LD50 dermal (rabbit): 13630 mg/kg

ETHYL-3-OXOBUTYRAT

LD50 oral (rat): 3980 mg/kg

Additional information

The inhalation of harmful substances above the air exposure limits may cause health problems such as irritation of the mucous membranes and the respiratory system as well as damages to the liver, kidneys or the central nervous system.

Indications are: headaches, dizziness, weariness, myasthenia, drowsiness and in serious cases unconsciousness.

A prolonged and repeated exposure to the product may cause a loss of moisture from the skin and may cause non_allergic skin damage (contact dermatitis) or harmful substance absorptions.

Splashes of the dissolvent may cause irritations or reversible damages to the eyes.

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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.

Measurement of ingredients

4-HYDROXY-4-METHYLPENTAN-2-ONE
EC50 24 hours Daphnia: 9000 mg/l
LC50 96 hours fish: 420 mg/l

ETHYL-3-OXOBUTYRAT
EC50 24 hours daphnia: 800 mg/l
LC50 48 hours fish: 275 mg/l

Persistence and degradability

62% in 21 days (OECD 301 D)
The product is readily biodegradable

Biodegradation – sewage plant

CSB value: 1315 mg O₂/g

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.

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

Waste code according to AVV

20 01 29 (cleaning agents that contain hazardous components)

14. Transport information

Land transport ADR/RID und GGVS/GGVE:

No dangerous good within the meaning of this rule.

Sea transport IMDG/GGVSee:

No dangerous good within the meaning of this rule.

Air transport ICAO-TI und IATA-DGR:

No dangerous good within the meaning of this rule.

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15. Regulatory information

Labeling according to Regulation (EC) No 1272/2008

Pictograms 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.

P302+P353 IF ON SKIN: Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. continue rinsing.

P301+P315+P101 IF SWALLOWED: Get immediate medical advice/attention. If medical advice is needed, have product container or label at hand

Labeling according to EC-directives

The categorization has been made according to the method of calculation of the Preparations Directive number 1999/45/EC.

Hazard Symbols and hazard statements of dangerous preparations



Xi; Irritant

R-phrases:

36 Irritating to eyes.

S-phrases:

2 Keep out of the reach of children.

24/25 Avoid contact with skin and with eyes.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

28 After contact with skin, wash immediately with plenty of water.

37 / 39 Wear suitable gloves and eye/face protection.

46 If swallowed, seek medical advice immediately and show this container or label.

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 weak water-endangering

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

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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

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

Wording of the H-statements in section 2 and 3

H312 Harmful in contact with skin

H315 Causes skin irritation

H318 Causes serious eye damage

H319 Causes serious eye irritation

Wording of the R-phrases in section 2 and 3

R 21 Harmful in contact with skin

R 36 Irritating to eyes

R 38 Irritating to skin

R41 Risk of serious damage to eyes

Recommended restrictions on use

None

Further hints

Data sources: <http://www.baua.de>, <http://www.hvbg.de>

Person responsible for this MSDS

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.