Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 02.02.2022 *Version number 16* *Revision: 02.02.2022*

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

· **1.1 Product identifier**

· **Trade name: AQUAFIN-P4 (B-Komp.)**

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.

· **Application of the substance / the mixture** Reaction resin

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

· **Manufacturer/Supplier:**
SCHOMBURG GmbH & Co. KG
Aquafinstr. 2-8
D-32760 Detmold
Germany

Tel: ++49 (0)5231/953-00
email: info@schomburg.de

· **Informing department:**
Product Safety Department

Tel: ++49 (0)5231/953-770
email: SDB@schomburg.de

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SECTION 2: Hazards identification

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

· **Classification according to Regulation (EC) No 1272/2008**

health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Carc. 2 H351 Suspected of causing cancer.
STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

Acute Tox. 4 H332 Harmful if inhaled.
Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.
STOT SE 3 H335 May cause respiratory irritation.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.

· **Hazard pictograms** GHS07, GHS08

· **Signal word** Danger

· **Hazard-determining components of labelling:**
diphenylmethanediisocyanate,isomeres and homologues
methylenediphenyl diisocyanate
Poly[oxy(methyl-1,2-ethanediyl)],.alpha.-hydro-.omega.-hydroxy-, polymer with 1,1'-methylenebis[isocyanatobenzene]
diphenylmethane-2,4'-diisocyanate

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· **Hazard statements**
H332 Harmful if inhaled.
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.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure.

· **Precautionary statements**

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P304+P340	IF INHALED: Remove person to fresh air and keep 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 in accordance with local/regional/national/ international regulations.

· **Additional information:**
EUH204 Contains isocyanates. May produce an allergic reaction.
· **2.3 Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

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SECTION 3: Composition/information on ingredients

· **3.2 Chemical characterisation: Mixtures**
· **Description:** Preparation based on Diphenylmethan-Diisocyanat-Prepolymers. (MDI)

· **Dangerous components:**

CAS: 9016-87-9 Index number: 615-005-00-9	diphenylmethanediisocyanate,isomeres and homologues Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335 Specific concentration limits: Eye Irrit. 2; H319: C ≥ 5 % Skin Irrit. 2; H315: C ≥ 5 % Resp. Sens. 1; H334: C ≥ 0.1 % STOT SE 3; C ≥ 5 %	25-50%
CAS: 108-32-7 EINECS: 203-572-1 Index number: 607-194-00-1	propylene carbonate Eye Irrit. 2, H319	10-25%
CAS: 39420-98-9 Polymer	Poly[oxy(methyl-1,2-ethanediyl)],.alpha.-hydro-.omega.-hydroxy-, polymer with 1,1'-methylenebis[isocyanatobenzene] Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	10-25%
CAS: 26447-40-5 EINECS: 247-714-0 Index number: 615-005-00-9	methylenediphenyl diisocyanate Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335 Specific concentration limits: Eye Irrit. 2; H319: C ≥ 5 % Skin Irrit. 2; H315: C ≥ 5 % Resp. Sens. 1; H334: C ≥ 0.1 % STOT SE 3; C ≥ 5 %	2.5-10%

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CAS: 5873-54-1 diphenylmethane-2,4'-diisocyanate 2.5-10%
EINECS: 227-534-9
Index number: 615-005-00-9
Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373;
Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319;
Skin Sens. 1, H317; STOT SE 3, H335
Specific concentration limits: Eye Irrit. 2; H319: C ≥ 5 %
Skin Irrit. 2; H315: C ≥ 5 %
Resp. Sens. 1; H334: C ≥ 0.1 %
STOT SE 3; C ≥ 5 %

· **Additional information** For the wording of the listed hazard phrases refer to section 16.

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SECTION 4: First aid measures

· **4.1 Description of first aid measures**
· **General information**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
Personal protection for the First Aider.
Do not leave affected persons unsupervised.
Instantly remove any clothing soiled by the product.
· **After inhalation**
Supply fresh air.
In case of irritation of the respiratory tract inflict fresh air. Consult the doctor.
In case of cardiac- or breath arrest: artificial respiration and cardiac massage.
· **After skin contact**
Instantly wash with water and soap and rinse thoroughly.
Change immediately contaminated clothes.
If skin irritation continues, consult a doctor.
· **After eye contact**
Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.
· **After swallowing**
Drink copious amounts of water and provide fresh air. Instantly call for doctor.
Show the packaging or the label to the doctor.
· **4.2 Most important symptoms and effects, both acute and delayed**
Corrosive effects on the skin, eyes and respiratory organs.
Asthma attacks
Allergic reactions
· **4.3 Indication of any immediate medical attention and special treatment needed**
The symptoms are to be treated.

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SECTION 5: Firefighting measures

· **5.1 Extinguishing media**
· **Suitable extinguishing agents** Carbon dioxide (CO2). Foam. Dry powder.
· **For safety reasons unsuitable extinguishing agents** Water.
· **5.2 Special hazards arising from the substance or mixture**
In case of fire unhealthy gas/vapour is formed.
Nitrogen oxides (NOx)
Carbon dioxide
Carbon monoxide (CO)
Hydrogen cyanide (HCN)
· **5.3 Advice for firefighters**
· **Protective equipment:**
Wear self-contained breathing apparatus.
Wear full protective suit.
· **Additional information**
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

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Follow the emergency-plan.
Burst- and explosion-danger by increasing pressure.
In case of fire chill the container with water spray.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation
Bring persons out of danger.
Wear protective equipment. Keep unprotected persons away.
· **6.2 Environmental precautions:** Do not allow product to reach sewage system or water bodies.
· **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
· **6.4 Reference to other sections**
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

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SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
Keep away from children.
· **Information about protection against explosions and fires:** No special measures required.

· **7.2 Conditions for safe storage, including any incompatibilities**
· **Storage**
· **Requirements to be met by storerooms and containers:**
The Product reacts with water and CO2-Gas will be given off.
In tight closed containers pressure may arise and the cover can burst.
· **Information about storage in one common storage facility:**
Please follow the rules of the VCI-Storage-Concept for chemicals.
· **Further information about storage conditions:**
Store container in a well ventilated position.
Store in a cool place.
Keep container tightly sealed.
Store in a locked cabinet and out of the reach of children.
· **7.3 Specific end use(s)** No further relevant information available.

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SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**
· **Additional information about design of technical systems:**
It must be possible to wash the skin in the working area.
Eye-wash bottle must be available.
· **Components with critical values that require monitoring at the workplace:**

9016-87-9 diphenylmethanediisocyanate,isomeres and homologues (25-50%)

WEL Short-term value: 0.07 mg/m³
Long-term value: 0.02 mg/m³
Sen; as -NCO

5873-54-1 diphenylmethane-2,4'-diisocyanate (2.5-10%)

WEL Short-term value: 0.07 mg/m³
Long-term value: 0.02 mg/m³
Sen; as -NCO

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· **Ingredients with biological limit values:**

5873-54-1 diphenylmethane-2,4'-diisocyanate (2.5-10%)

BMGV 1 µmol creatinine/mol
Medium: urine
Sampling time: At the end of the period od exposure
Parameter: isocyanate-derived diamine

· **Additional information:** The lists that were valid during the compilation were used as basis.

· **8.2 Exposure controls**
· **Personal protective equipment**
· **General protective and hygienic measures**
The usual precautionary measures should be adhered to in handling the chemicals.
Instantly remove any soiled and impregnated garments.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.
Be sure to clean skin thoroughly after work and before breaks.
When the material is hardened on the skin, remove it carfully mechanically.
· **Breathing equipment:**
In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air.
Recommended Filter type A
· **Protection of hands:** Hand Protection: Nitril-rubber-latex-gloves.
· **Material of gloves**
Nitril-rubber-latex-gloves II R: Thickness ≥ 0,5mm; Penetration time ≥ 480 min
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
· **Penetration time of glove material**
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Eye protection:** Tightly sealed safety glasses.
· **Body protection:**
Protective work clothing.
Contaminated protection clothes must be cleaned carefully before reuse.

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SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**
· **General Information**
· **Appearance:**

Form:	Liquid
Colour:	Dark brown
· **Smell:**	earthy, something musty.
· **Odour threshold:**	Not determined.
· **pH-value:**	Mixture is non-soluble (in water).
· **Change in condition**	
Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	Not determined
· **Flash point:**	Not applicable
· **Inflammability (solid, gaseous)**	Not applicable.
· **Decomposition temperature:**	Not determined.
· **Self-inflammability:**	Product is not selfigniting.

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· **Explosive properties:**	Product is not explosive.
· **Critical values for explosion:**	
Lower:	Not determined.
Upper:	Not determined.
· **Steam pressure:**	Not determined.
· **Density at 20 °C**	1.21 g/cm³
· **Relative density**	Not determined.
· **Vapour density**	Not determined.
· **Evaporation rate**	Not determined.
· **Solubility in / Miscibility with**	
Water:	Not miscible or difficult to mix
· **Partition coefficient: n-octanol/water:**	Not determined.
· **Viscosity:**	
dynamic at 20 °C:	23 mPas
kinematic:	Not determined.
· 9.2 Other information	No further relevant information available.

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SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.
· **10.2 Chemical stability**
· **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
· **10.3 Possibility of hazardous reactions** No dangerous reactions known
· **10.4 Conditions to avoid** No further relevant information available.
· **10.5 Incompatible materials:**
Acids
Water
Alkoholes
Alkalis
Amine
· **10.6 Hazardous decomposition products:** No dangerous decomposition products known

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SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**
· **Acute toxicity**
Harmful if inhaled.
· **LD/LC50 values that are relevant for classification:**

9016-87-9 diphenylmethanediisocyanate,isomeres and homologues

Oral	LD50	>10,000 mg/kg (rats) (OECD 401)
Dermal	LD50	>9,400 mg/kg (rabbit) (OECD 402)

5873-54-1 diphenylmethane-2,4'-diisocyanate

Oral	LD50	>2,000 mg/kg (rats) (84/449/EWG, B.1)
Dermal	LD50	>9,400 mg/kg (Kan) (OECD 402)
	EC/LC50 (24h)	>1,000 mg/l (Daphnia magna) (OECD 202)

· **Primary irritant effect:**
· **Skin corrosion/irritation**
The product has an irritate-effect.
Causes skin irritation.

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· **Serious eye damage/irritation**
Causes serious eye irritation.
· **Respiratory or skin sensitisation**
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
· **Additional toxicological information:** Sensitizing
· **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
· **Carcinogenicity**
Suspected of causing cancer.
· **Reproductive toxicity** Based on available data, the classification criteria are not met.
· **STOT-single exposure**
May cause respiratory irritation.
· **STOT-repeated exposure**
May cause damage to organs through prolonged or repeated exposure.
· **Aspiration hazard** Based on available data, the classification criteria are not met.

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SECTION 12: Ecological information

· **12.1 Toxicity**
· **Aquatic toxicity:**

9016-87-9 diphenylmethanediisocyanate,isomeres and homologues

EC 50	>1,000 mg/kg (dam) (OECD 202 (24 h))
	>1,640 mg/kg (Grünalge (Scenedesmus subspicatus)) (OECD 201)
LC50/96h	>1,000 mg/l (zebra danio) (OECD 203)
EC50 (3h)	>100 mg/l (Atmungshem. von kommunalem Belebtschlamm) (OECD 209)
ERC50	>1,640 mg/l (Grünalge (Scenedesmus subspicatus)) (OECD 201 (72 h))
NOEC	>1,000 mg/kg (Avena sativa) (OECD 208 (14 d))
	>1,000 mg/kg (Eisenia fetida) (OECD 207 (14 d))
	>1,000 mg/kg (Lactuca sativa) (OECD 208 (14 d))
NOEC	>10 mg/l (dam) (OECD 202 (21 d))

5873-54-1 diphenylmethane-2,4'-diisocyanate

LC50/96h	>1,000 mg/l (zebra danio) (OECD 203)
EC50 (3h)	>100 mg/l (Atmungshem. von kommunalem Belebtschlamm) (OECD 209)
ERC50	>1,640 mg/l (Scenedesmus subspicatus) (OECD 201 (72 h))
NOEC	>1,000 mg/kg (Avena sativa) (OECD 208 (14 d))
	>1,000 mg/kg (Eisenia fetida) (OECD 207 (14 d))
	>1,000 mg/kg (Lactuca sativa) (OECD 208 (14 d))
NOEC	>10 mg/l (Daphnia magna) (OECD 202 (21 d))

· **12.2 Persistence and degradability** No further relevant information available.
· **12.3 Bioaccumulative potential** No further relevant information available.
· **12.4 Mobility in soil** No further relevant information available.
· **Additional ecological information:**
· **General notes:**
Water hazard class 1 (Self-assessment): slightly hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.
· **12.5 Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **12.6 Other adverse effects** No further relevant information available.

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SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**
· **Recommendation**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packagings:**
· **Recommendation:** Disposal must be made according to official regulations.

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SECTION 14: Transport information

· **14.1 UN-Number**	
· **ADR, IMDG, IATA**	Void
· **14.2 UN proper shipping name**	
· **ADR, IMDG, IATA**	Void
· **14.3 Transport hazard class(es)**	
· **ADR, ADN, IMDG, IATA**	
· **Class**	Void
· **14.4 Packing group**	
· **ADR, IMDG, IATA**	Void
· **14.5 Environmental hazards:**	Not applicable.
· **14.6 Special precautions for user**	Not applicable.
· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**	Not applicable.
· **UN "Model Regulation":**	Void

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SECTION 15: Regulatory information

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

· **Directive 2012/18/EU**
· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

· **National regulations**

· **Technical instructions (air):**
· **Class Share in %**
· **I 49.3**
NK 17.5
· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**
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.

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H335 May cause respiratory irritation.
H351 Suspected of causing cancer.
H373 May cause damage to organs through prolonged or repeated exposure.

· **Department issuing data specification sheet:** Environment protection department.
· **Contact:** Environment protection department.
· **Abbreviations and acronyms:**
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 4: Acute toxicity – Category 4
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Resp. Sens. 1: Respiratory sensitisation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1
Carc. 2: Carcinogenicity – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
· *** Data compared to the previous version altered.**