

Page 1/11

Printing date 17.10.2013 Revision: 17.10.2013 Version number 5

Safety data sheet according to 1907/2006/EC, Article 31

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

1.1 Product identifier

Trade name: AQUA BODY HARDENER 774

Article number: 423

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

Sector of Use

Sector of Use SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen) Product category PC9c Finger paints PC9a Coatings and paints, thinners, paint removers Process category PROC9 Transfer of substance or preparation into small containers (dedicated filling line, including weighing) Environmental release category ERC2 Formulation of preparations Article category AC1 Vehicles Application of the substance / the preparation Surface protection

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: H.B. BODY S.A B' ENTRANCE BLOCK 50 DA9 & MB6 Str THESSALONIKI INDUSTRIAL AREA 57.022, SINDOS THESSALONIKI,GREECE Ph: +30 2310 790 000 Fax: +30 2310 790 033 www.hbbody.com email: hbbody@hbbody.com

Further information obtainable from: H.B. BODY S.A B' ENTRANCE BLOCK 50 DA9 & MB6 Str THESSALONIKI INDUSTRIAL AREA 57.022, SINDOS THESSALONIKI,GREECE Ph: +30 2310 790 000 Fax: +30 2310 790 033 www.hbbody.com email: hbbody@hbbody.com

1.4 Emergency telephone number: +30 2310 790 000

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

| Xn; Ha | armful |
|------------|--|
| R20/21: | Harmful by inhalation and in contact with skin. |
| Xi; Ser | isitising |
| R43: | May cause sensitisation by skin contact. |
| R10-52/53: | Flammable. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| Info | rmation concerning particular hazards for human and environment: |
| | product has to be labelled due to the calculation procedure of the "General Classification guideline for |
| prepa | arations of the EU" in the latest valid version. |

Trade name: AQUA BODY HARDENER 774

Classification system:

(Contd. of page 1)

GB

The classification is according to the latest editions of the EU-lists addapting Directive 67/548/EEC on the classification, packaging and labelling of dangerous substances and extended by company and literature data.

2.2 Label elements

Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

Code letter and hazard designation of product:

Xn Harmful

Hazard-determining components of labelling:

Isocyanates

2-butoxyethyl acetate

Risk phrases:

10 Flammable.

- 20/21 Harmful by inhalation and in contact with skin.
- 43 May cause sensitisation by skin contact.

52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:

- 9 Keep container in a well-ventilated place.
- 23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
- 29 Do not empty into drains.
- 36/37 Wear suitable protective clothing and gloves.
- 43 In case of fire, use sand, carbon dioxide or powdered extinguishing agent. Never use water.
- 51 Use only in well-ventilated areas.
- 60 This material and its container must be disposed of as hazardous waste.
- 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

Special labelling of certain preparations:

Contains isocyanates. See information supplied by the manufacturer

2.3 Other hazards

Results of PBT and vPvB assessment

This product contains no substance that is considered to be persistent, bioaccumulating or non toxic(PBT). This mixture contains no substance that is considered to be very persistent or very bioaccumulating (vPvB).

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterization: Mixtures

Description: Mixture of hazardous substances

Dangerous components:

| CAS: 28182-81-2 NLP: 500-060-2 | Isocyanates X Xi R43 R52/53 | 50 - <60% |
|---|---|-----------------|
| | Skin Sens. 1, H317 Aquatic Chronic 3, H412 | |
| CAS: 112-07-2 EINECS: 203-933-3 | 2-butoxyethyl acetate Xn R20/21 | 35 - <40% |
| Index number: 607-038-00-2 RTECS: KJ 8925000 Reg.nr.: 01-2119475112-47-0002 | 🚯 Acute Tox. 4, H312; Acute Tox. 4, H332 | |
| | (Co | ntd. on page 3) |

(Contd. of page 2)

Additional information: For the wording of the listed risk phrases refer to section 16.

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.

After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

After skin contact: Immediately wash with water and soap and rinse thoroughly.

After eye contact: Rinse opened eye for several minutes under running water.

After swallowing: If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents:

General aqueous film forming foam, Carbon dioxide (CO2), dry chemical extinguishing powder or water spray. Do not use water.

For safety reasons unsuitable extinguishing agents: Water with full jet

5.2 Special hazards arising from the substance or mixture No further relevant information available.

Hazarous combustion products

Fire will produce a dense black smoke containing hazardous decomposition by products. Exposure to those may be a hazard to health.

5.3 Advice for firefighters

Firefighters should always protective equipment and breathing apparatus when handling fire coming from these products

Speial protective equipment and fire fighting procedures:

Mouth respiratory protective device.

Firefighters should wear full protective flameproof clothing and self contained breathing apparatus for the firefighter if necessary. In the event of any fire try cool down the tanks with water spray. If possible do not allow the water used by firefighters to enter the drains or come in any contact with the water supply lines for the public. Always seek as appropriate. Additional information Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions:

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

Safety data sheet according to 1907/2006/EC, Article 31

Trade name: AQUA BODY HARDENER 774

See Section 13 for disposal information.

(Contd. of page 3)

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility:

As genoral storage guide: store separately from oxidizing agents and strongly alkaline and strongly acidic materials. Do not store together with explosives, gases, oxidizing solids, products which form flammable gases in contact with water, oxidizing products, infectious products and radioactive products.

Further information about storage conditions: Keep container tightly sealed.

7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7.

8.1 Control parameters

| Ingredients with limit values that require monitoring | at the workplace: | |
|---|--|-----------|
| 112-07-2 2-butoxyethyl acetate | | |
| WEL Short-term value: 332 mg/m ³ , 50 ppm Long-term value: 133 mg/m ³ , 20 ppm Sk | | |
| DNELs CAS No: Substance End Use Routes of ex 123-86-4 Butyl Acetate Workers I 100mg/kg Additional information: The lists valid during the | nhalation Long Term Systemic | Effect |
| 8.2 Exposure controls Personal protective equipment: | | |
| General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated cloth Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin. Respiratory protection: | ng ory filter device. In case of intensive or longer exposure u | ise self- |

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation Material of gloves

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

(Contd. on page 5)

Trade name: AQUA BODY HARDENER 774

(Contd. of page 4)

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.

For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:

The breakthough time of gloves is unknown for this product itself. The glove material that can be used is recommended on the baseis of the different substances in the preparation.

For the permanent contact gloves made of the following materials are suitable:

Fluorocarbon rubber (Viton)

For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:

Rubber gloves Eye protection:

Tightly sealed goggles

Body protection: Protective work clothing

SECTION 9: Physical and chemical properties

| 9.1 Information on basic physical and chem | nical properties |
|--|--|
| General Information | |
| Appearance: | |
| Form: | Liquid |
| Colour: | Light yellow |
| Odour: | Characteristic |
| Odour threshold: | Not determined. |
| pH-value: | Not determined. |
| Change in condition | |
| Melting point/Melting range: | Undetermined. |
| Boiling point/Boiling range: | 184 °C |
| Flash point: | 21 - 55 °C |
| Flammability (solid, gaseous): | Not applicable. |
| Autoignition temperature: | 280 °C |
| Decomposition temperature: | Not determined. |
| Self-igniting: | Product is not selfigniting. |
| Danger of explosion: | Risk of explosion by shock, friction, fire or other sources of ignition. |
| Explosion limits: | |
| Lower: | 1.7 Vol % |
| Upper: | 8.4 Vol % |
| Vapour pressure at 20 °C: | 0.4 hPa |
| Density at 20 °C: | 1.072 g/cm ³ |
| Relative density | Not determined. |
| Vapour density | Not determined. |
| Evaporation rate | Not determined. |
| | (Contd. on page |

| | (Contd. of pag |
|----------------------------------|--|
| Solubility in / Miscibility with | |
| water: | Not miscible or difficult to mix. |
| Partition coefficient (n-octanol | /water): Not determined. |
| Viscosity: | |
| Dynamic: | Not determined. |
| Kinematic: | Not determined. |
| Solvent content: | |
| Organic solvents: | 40.0 % |
| VOC (EC) | - |
| · · · · | 428.8 g/l |
| Solids content (volume): | 59.4 % |
| 9.2 Other information | No further relevant information available. |

SECTION 10: Stability and reactivity

10.1 Reactivity

- **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: No further relevant information available.
- 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity:

LD/LC50 values relevant for classification:

| 112-07-2 2-butoxyethyl acetate |
|--------------------------------|
|--------------------------------|

Oral LD50 2400 mg/kg (rat)

Dermal LD50 1580 mg/kg (rabbit)

Primary irritant effect:

on the skin: No irritant effect.

on the eye: No irritating effect.

Sensitization: Sensitization possible through skin contact.

Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Harmful Irritant

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

This product is not toxic for the aquatic life. Nevertheless do not dispose the product or any cleaning solvents used along with this product into the sea

(Contd. on page 7)

Trade name: AQUA BODY HARDENER 774

(Contd. of page 6)

12.2 Persistence and degradability

This prouduct contains polyesteric molecules and organic solvents and is not known to be bioaccumulative. It can be considered as biodegradable in small quantities. In case of disposal, it should be treated as a hazardous material and should be disposed accordingly. Do not just throw it away

12.3 Bioaccumulative potential

This product is not known to have bioaccumulative potentials. It should not be disposed in areas where living organisms could consume. Dispose it as a hazardous material according to local laws and regislations

12.4 Mobility in soil

This product is not considered to present any mobility in soil. Do not dispose it in the soil and treat it as a hazardous product according to local laws and legislations.

Ecotoxical effects:

Remark: Harmful to fish

Additional ecological information:

General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Harmful to aquatic organisms

12.5 Results of PBT and vPvB assessment

PBT: This product contains no substance that is considered to be persistent, bioaccumulating or non toxic(PBT).

vPvB: This mixture contains no substance that is considered to be very persistent or very bioaccumulating (vPvB).

12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

| 14.1 UN-Number ADR, IMDG, IATA | UN1992 |
|-------------------------------------|--|
| 14.2 UN proper shipping name ADR | 1992 FLAMMABLE LIQUID, TOXIC, N.O.S. (2-butoxyeth acetate) |
| IMDG, IATA | FLAMMABLE LIQUID, TOXIC, N.O.S. (2-butoxyethyl acetate) |
| 14.3 Transport hazard class(es) | |
| ADR | |
| | |
| Class | 3 (FT1) Flammable liquids. |
| Label | 3+6.1 |
| IMDG, IATA | |
| | |
| Class | 3 Flammable liquids. |

on page 8)

| UN "Model Regulation": | UN1992, FLAMMABLE LIQUID, TOXIC, N.O.S. (2-butoxyeth acetate), 3 (6.1), III |
|--|---|
| Tunnel restriction code | D/E |
| Transport category | 3 |
| Limited quantities (LQ) | 5L |
| ADR | |
| Transport/Additional information: | |
| 14.7 Transport in bulk according to Annex II MARPOL73/78 and the IBC Code | of Not applicable. |
| EMS Number: | F-E,S-D |
| Danger code (Kemler): | 36 |
| 14.6 Special precautions for user | Warning: Flammable liquids. |
| Marine pollutant: | No |
| 14.5 Environmental hazards: | |
| 14.4 Packing group ADR, IMDG, IATA | III |
| Label | 3+6.1 |
| | (Contd. of page |

SECTION 15: Regulatory information

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

Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

Code letter and hazard designation of product:



Xn Harmful

Hazard-determining components of labelling:

Isocyanates 2-butoxyethyl acetate

Risk phrases:

10 Flammable.

- 20/21 Harmful by inhalation and in contact with skin.
- 43 May cause sensitisation by skin contact.
- 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:

- 9 Keep container in a well-ventilated place.
- 23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
- 29 Do not empty into drains.
- 36/37 Wear suitable protective clothing and gloves.
- 43 In case of fire, use sand, carbon dioxide or powdered extinguishing agent. Never use water.
- 51 Use only in well-ventilated areas.
- 60 This material and its container must be disposed of as hazardous waste.
- 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

Special labelling of certain preparations:

Contains isocyanates. See information supplied by the manufacturer

Page 9/11

Printing date 17.10.2013 Revision: 17.10.2013 Version number 5

Trade name: AQUA BODY HARDENER 774

15.2 Chemical safety assessment: A Chemical Safety Assessment has been carried out.

(Contd. of page 8)

| SECTION 16: Other information |
|---|
| This information is based on our current knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. |
| Relevant phrases H312 Harmful in contact with skin. H317 May cause an allergic skin reaction. H332 Harmful if inhaled. H412 Harmful to aquatic life with long lasting effects. |
| R20/21 Harmful by inhalation and in contact with skin. R43 May cause sensitisation by skin contact. R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Classification according to Regulation (EC) No 1272/2008 |
| GHS02 flame |
| Flam. Liq. 3 H226 Flammable liquid and vapour. |
| Acute Tox. 4H332 Harmful if inhaled.Skin Sens. 1H317 May cause an allergic skin reaction. |
| Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects. |
| Department issuing MSDS: Department of Quality Control Contact: H.B BODY S.A Ms Olympia Stamkou Ph: +30 2310 790 032 fax: +30 2310 790 033 |
| email: stamkou@hbbody.com Abbreviations and acronyms: RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) ICAO: International Civil Aviation Organization ADR: Accord européen sur le transport 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 Maritime Code for Dangerous Goods IATA: International Air Transport Association EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European Inst of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) VOC: Volatile Organic Compounds (USA, EU) DNEL: Derived No-Effect Level (REACH) LCS0: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent * Data compared to the previous version altered. |

(Contd. on page 10)

(Contd. of page 9)

Annex: Exposure scenario

Short title of the exposure scenario

General Statement: The exposure senarios on the MSDS tend to provide specific information on how a hazardous substance, found in a preparation or as a raw material can be managed and controlled. It considers specific conditions of use in order to ensure that a use can be safe to humans and the environment. Identified risk management measures are to be implemented unless the downstream user is able to ensure a safe handling of the material in a different way.

Sector of Use

Successfor of orest SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen) Product category PC9c Finger paints PC9a Coatings and paints, thinners, paint removers Process category PROC9 Transfer of substance or preparation into small containers (dedicated filling line, including weighing) Article category AC1 Vehicles Environmental release category ERC2 Formulation of preparations Description of the activities / processes covered in the Exposure Scenario

See section 1 of the annex to the Safety Data Sheet.

Conditions of use According to directions for use.

- **Duration and frequency**
- 5 workdays/week.

Frequency of use:

Physical parameters

The data on the physical - chemical properties in the Exposure Scenario is based on the properties of the preparation.

Physical state Fluid

Concentration of the substance in the mixture The substance is main component.

Other operational conditions

Other operational conditions affecting environmental exposure Use only on hard ground.

Other operational conditions affecting worker exposure

Avoid contact with the skin.

Avoid long-term or repeated skin contact.

Do not breathe gas/vapour/aerosol.

Other operational conditions affecting consumer exposure No special measures required.

Other operational conditions affecting consumer exposure during the use of the product Not applicable.

Risk management measures

Worker protection

Organisational protective measures

No special measures required.

Ensure good ventilation. This can be achieved by using a local exhaustion or general exhaust system. If these measures are insufficient to keep the solvent vapour concentration below the workplace limit, wear an adequate respiratory protective device.

Technical protective measures

Use product only in enclosed systems.

Ensure that suitable extractors are available on processing machines

Personal protective measures

Do not inhale gases / fumes / aerosols.

Avoid contact with the skin.

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use selfcontained respiratory protective device.

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Measures for consumer protection

Ensure adequate labelling.

Observe consumer information and advice on safe use.

(Contd. of page 10)

GB

Environmental protection measures

Water

Do not allow to reach sewage system.

Do not allow to reach sewage system. Dispose of this product and its container at hazardous or special waste collection point.

Soil

Prevent contamination of soil.

The product is only processed over the concrete collecting basin.

Disposal measures

Disposal must be made according to official regulations.

Ensure that waste is collected and contained.

Disposal procedures Must not be disposed together with household garbage. Do not allow product to reach sewage system. Waste type Partially emptied and uncleaned packaging

Exposure estimation

Consumer

Not relevant for this Exposure Scenario.

This product is to be used by professional technitians only.

Guidance for downstream users

Whether the downstream user acts within the scope of the Exposure Scenario can be verified based on the information in sections 1 to 8.