

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

**1.1 Product identifier**

Trade name: AUTO HARDENER 534 HARDENER FOR PRIMERS

Article number: 445

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

Sector of Use SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

Product category PC9b Fillers, putties, plasters, modelling clay

Process category

PROC8a Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities

Environmental release category ERC2 Formulation of preparations

Article category AC1 Vehicles

Application of the substance / the mixture

Hardening agent/ Curing agent

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

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Further information obtainable from:

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**1.4 Emergency telephone number:**

Regional Medicines and Poisons Information Centre NI

Pharmacy Department, Royal Hospital Suite

Grosvenor Road Belfast

Telephone: +44 28 90 63 2032

Fax: +44 28 90 24 80 30

Emergency telephone: 844 892 0111

E-mail address: nirdic.nirdic@belfasttrust.hscni.net

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**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS08 health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.



GHS07

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 H336 May cause drowsiness or dizziness.

**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**

GHS02



GHS07



GHS08

Signal word **Danger****Hazard-determining components of labelling:**

xylene

Aromatic Polyisocyanate

n-butyl acetate

m-tolylidene diisocyanate

**Hazard statements**

H226 Flammable liquid and vapour.

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.

H336 May cause drowsiness or dizziness.

**Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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.

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**2.3 Other hazards****Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**SECTION 3: Composition/information on ingredients****3.2 Chemical characterisation: Mixtures****Description:** Mixture of hazardous substances**Dangerous components:**

CAS: 123-86-4 EINECS: 204-658-1 Index number: 607-025-00-1 RTECS: AF 7350000 Reg.nr.: 01-2119485493-29-007 01-2119485493-29-004 01-2119485493-29-003 01-2119485493-29-005 01-2119485493-29	n-butyl acetate ⚠ Flam. Liq. 3, H226 ⚠ STOT SE 3, H336	35 - <40%
CAS: 1330-20-7 EINECS: 215-535-7 Index number: 601-022-00-9 RTECS: ZE 2100000 Reg.nr.: 01-2119488216-32-001 01-2119488216-32-002 01-2119488216-32-003	xylene ⚠ Flam. Liq. 3, H226 ⚠ Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	25 - <30%
CAS: 53317-61-6	Aromatic Polyisocyanate ⚠ Eye Irrit. 2, H319; Skin Sens. 1, H317	15 - <20%
CAS: 28182-81-2 NLP: 500-060-2	Isocyanates ⚠ Skin Sens. 1, H317 Aquatic Chronic 3, H412	5 - <10%
CAS: 141-78-6 EINECS: 205-500-4 Index number: 607-022-00-5 RTECS: AH 5425000 Reg.nr.: 05-2115809633-47-0000	ethyl acetate ⚠ Flam. Liq. 2, H225 ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	5 - <10%
CAS: 26471-62-5 EINECS: 247-722-4 Index number: 615-006-00-4	m-tolyldiene diisocyanate ⚠ Acute Tox. 2, H330 ⚠ Resp. Sens. 1, H334; Carc. 2, H351 ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335 Aquatic Chronic 3, H412	0.1-<0.3%

**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. If symptoms persist, consult a doctor. Remove contact lenses in case of eye contamination and irrigate copiously with clean water for at least 15 minutes trying to hold the eye lids open.

**After swallowing:** If symptoms persist consult doctor.

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**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 (CO<sub>2</sub>), 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.

**Hazardous 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

**Special protective equipment and fire fighting procedures:** Mouth respiratory protective device.

**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.

See Section 13 for disposal information.

## 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:** Not required.

**Further information about storage conditions:** Keep container tightly sealed.

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

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**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:**

123-86-4 n-butyl acetate	
WEL	Short-term value: 966 mg/m <sup>3</sup> , 200 ppm Long-term value: 724 mg/m <sup>3</sup> , 150 ppm
1330-20-7 xylene	
WEL	Short-term value: 441 mg/m <sup>3</sup> , 100 ppm Long-term value: 220 mg/m <sup>3</sup> , 50 ppm Sk; BMGV
141-78-6 ethyl acetate	
WEL	Short-term value: 400 ppm Long-term value: 200 ppm
26471-62-5 m-tolyldiene diisocyanate	
WEL	Short-term value: 0.07 mg/m <sup>3</sup> Long-term value: 0.02 mg/m <sup>3</sup> Sen; as -NCO

**Ingredients with biological limit values:**

1330-20-7 xylene	
BMGV	650 mmol/mol creatinine Medium: urine Sampling time: post shift Parameter: methyl hippuric acid

Additional information: The lists valid during the making were used as basis.

**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 clothing  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.

**Respiratory protection:**

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

**Protection of hands:**

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

**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 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 gloves made of the following materials are suitable:

Fluorocarbon rubber (Viton)

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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 chemical properties

#### General Information

Appearance:

Form:

Fluid

Colour:

Dark yellow

Odour:

Characteristic

Odour threshold:

Not determined.

pH-value: Not determined.

#### Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 77 °C

Flash point: 21 - 55 °C

Flammability (solid, gaseous): Not applicable.

Autoignition temperature: 370 °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: 1.1 Vol %

Upper: 7.5 Vol %

Vapour pressure at 20 °C: 10.7 hPa

Density at 20 °C: 0.97698 g/cm<sup>3</sup>

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: Not determined.

Kinematic: Not determined.

#### Solvent content:

Organic solvents: 72.1 %

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VOC (EC) 704.0 g/l

Solids content (volume): 27.8 %

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:****ATE (Acute Toxicity Estimates)**

Dermal LD50 6667 mg/kg (rabbit)

Inhalative LC50/4 h 33.6 mg/l

**123-86-4 n-butyl acetate**

Oral LD50 13100 mg/kg (rat)

Dermal LD50 &gt;5000 mg/kg (rabbit)

Inhalative LC50/4 h &gt;21.0 mg/l (rat)

**1330-20-7 xylene**

Oral LD50 4300 mg/kg (rat)

Dermal LD50 2000 mg/kg (rabbit)

Inhalative LC50/4 h 11 mg/l (ATE)

**141-78-6 ethyl acetate**

Oral LD50 5620 mg/kg (rabbit)

Inhalative LC50/4 h 1600 mg/l (rat)

**26471-62-5 m-tolyldiene diisocyanate**

Inhalative LC50/4 h 0.5 mg/l (ATE)

**Primary irritant effect:****Skin corrosion/irritation** Irritant to skin and mucous membranes.**Serious eye damage/irritation** Irritating effect.**Respiratory or skin sensitisation**

Sensitisation possible through inhalation.

Sensitisation possible through skin contact.

Sensitising effect through inhalation is possible by prolonged exposure.

**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

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**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

**12.2 Persistence and degradability**

This product 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** No further relevant information available.**12.4 Mobility in soil** No further relevant information available.**Additional ecological information:****General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

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

Danger to drinking water if even small quantities leak into the ground.

**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.

**SECTION 14: Transport information****14.1 UN-Number**

ADR, IMDG, IATA

UN1263

**14.2 UN proper shipping name**

ADR

1263 PAINT, special provision 640E

IMDG, IATA

PAINT

**14.3 Transport hazard class(es)**

ADR



**Class  
Label**

3 (F1) Flammable liquids.

3

IMDG, IATA

**Class**

3 Flammable liquids.

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Label	3
14.4 Packing group ADR, IMDG, IATA	III
14.5 Environmental hazards: Marine pollutant:	No
14.6 Special precautions for user Danger code (Kemler): EMS Number:	Warning: Flammable liquids. 30 F-E, <u>S-E</u>
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
ADR	
Limited quantities (LQ)	5L
Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
Transport category	3
Tunnel restriction code	D/E
IMDG	
Limited quantities (LQ)	5L
Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
UN "Model Regulation":	UN1263, PAINT, special provision 640E, 3, III

**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.

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

- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H330 Fatal if inhaled.
- H332 Harmful if inhaled.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H351 Suspected of causing cancer.
- H412 Harmful to aquatic life with long lasting effects.

Department issuing MSDS: Department of Quality Control

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**Contact:**

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**Abbreviations and acronyms:**

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 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)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Flam. Liq. 3: Flammable liquids, Hazard Category 3

Acute Tox. 4: Acute toxicity, Hazard Category 4

Acute Tox. 2: Acute toxicity, Hazard Category 2

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

Carc. 2: Carcinogenicity, Hazard Category 2

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

\* **Data compared to the previous version altered.**

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**Annex: Exposure scenario****Short title of the exposure scenario****Sector of Use SU3 Industrial uses:** Uses of substances as such or in preparations at industrial sites**Product category PC9b** Fillers, putties, plasters, modelling clay**Process category****PROC8a** Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities**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** No special measures required.**Other operational conditions affecting worker exposure**

Avoid contact with the skin.

Avoid long-term or repeated skin contact.

Do not breathe gas/vapour/aerosol.

Take precautionary measures against static discharge.

Keep away from sources of ignition - No smoking.

Avoid contact with eyes.

**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**

Provide explosion-proof electrical equipment.

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 self-contained 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

Avoid contact with the eyes.

Tightly sealed goggles

**Measures for consumer protection**

Ensure adequate labelling.

Observe consumer information and advice on safe use.

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### Environmental protection measures

#### Water

No special measures required.

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

**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 technicians 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.