according to Regulation (EC) No. 1907/2006 (REACH)

according to Regulation (EU) 2015/830

Article No.: 40 27289 03084 5 Härter für

Print date: 23.04.2019 Revision date: 17.04.2019 31390 EN Version: 1.3 Revision date: 05.07.2018 Page 1 / 9



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

1.1. Product identifier

Article No. (manufacturer/supplier)

Trade name/designation

40 27289 03084 5

Härter für

Multi-Füller 2K

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

Relevant identified uses

Hardener

1.3. Details of the supplier of the safety data sheet

manufacturer

Auto-Teile-Ring GmbH

Otto-Hirsch-Brücken 17 Telephone: +49 711/918979-0
DE 70329 Stuttgart Telefax: +49 711/918979-30
E-mail info@cartechnic.de

Website: www.atr.de

Dept. responsible for information:

Department for dangerous goods

E-mail (competent person) info@cartechnic.de

1.4. Emergency telephone number

Emergency telephone number Giftinformationszentrum Mainz – Tel.: +49 (6131)

19240

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

Flam. Liq. 3 / H226 Flammable liquids Flammable liquid and vapour.

Skin Sens. 1 / H317 Respiratory or skin sensitisation May cause an allergic skin reaction.

STOT SE 3 / H335 STOT-single exposure May cause drowsiness or dizziness.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms





Warning

Hazard statements

H226 Flammable liquid and vapour.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
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 equipment.

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

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

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P405 Keep locked up.

Hazard components for labelling 1,6-Hexamethylene diisocyanate homopolymer

n-butyl acetate

Supplemental Hazard information (EU)

EUH066 Repeated exposure may cause skin dryness or cracking. EUH204 Contains isocyanates. May produce an allergic reaction.

2.3. Other hazards

according to Regulation (EC) No. 1907/2006 (REACH)

according to Regulation (EU) 2015/830

Article No.: 40 27289 03084 5 Härter für

31390 EN Print date: 23.04.2019 Revision date: 17.04.2019 Version: Issue date: 05.07.2018 Page 2 / 9



SECTION 3: Composition / information on ingredients

3.2. **Mixtures**

Mixture of substances listed below with nonhazardous additions. Description

Classification according to Regulation (EC) No 1272/2008 [CLP]

EC No. CAS No.	REACH No.	Wt %
INDEX No.	Designation classification: // Remark	VVL 76
204-658-1	01-2119485493-29	
123-86-4	n-butyl acetate	50 < 100
607-025-00-1	Flam. Liq. 3 H226 / STOT SE 3 H336	
500-060-2	01-2119485796-17	
28182-81-2	1,6-Hexamethylene diisocyanate homopolymer	25 < 50
	Acute Tox. 4 H332 / Skin Sens. 1 H317 / STOT SE 3 H335	
203-603-9	01-2119475791-29	
08-65-6	2-methoxy-1-methylethyl acetate	5 < 10
607-195-00-7	Flam. Liq. 3 H226	
203-933-3	01-2119475112-47	
12-07-2	2-butoxyethyl acetate	1 < 5
607-038-00-2	Acute Tox. 4 H302 / Acute Tox. 4 H312 / Acute Tox. 4 H332	

Additional information

Full text of classification: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours.In case of irregular breathing or respiratory arrest provide artificial respiration.

In case of inhalation

Remove casualty to fresh air and keep warm and at rest. If unconscious place in recovery position and seek medical advice.

Following skin contact

Take off immediately all contaminated clothing. After contact with skin, wash immediately with plenty of water and soap. Do not use solvents or thinners.

After eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

After ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Seek medical advice immediately. Keep victim calm. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

In all cases of doubt, or when symptoms persist, seek medical advice.

4.3. Indication of any immediate medical attention and special treatment needed

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

alcohol resistant foam, carbon dioxide, Powder, spray mist, (water)

Unsuitable extinguishing media

strong water jet

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Nitrogen oxides (NOx), Carbon monoxide, Hydrogen cyanide (hydrocyanic acid)

5.3. Advice for firefighters

Use suitable breathing apparatus. Cool closed containers that are near the source of the fire. Do not allow water used to



according to Regulation (EC) No. 1907/2006 (REACH)

according to Regulation (EU) 2015/830

40 27289 03084 5 Härter für Article No.:

Print date: 23.04.2019 Revision date: 17.04.2019 31390 EN Version: Issue date: 05.07.2018 Page 3 / 9





SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep away from sources of ignition. Ventilate affected area. Do not breathe vapours. Use personal protection equipment.

6.2. **Environmental precautions**

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

Methods and material for containment and cleaning up 6.3.

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13). Use appropriate container to avoid environmental contamination. Fouled surfaces must be immediately cleaned with suitable solvents. Useable as such (flammable): water 45 vol.% ethanol or i-propanol 50 vol. % ammonia solution (density= 0.88) 5 vol.% Alternative (non-flammable): sodium carbonate 5 vol.% water 95 vol.%.

Take up spilled residuals with the same agent and leave them for a few days in unclosed containers until there is no further reaction. Then, close the containers and dispose of them in accordance with the regulations for waste removal (refer to section 13).

Reference to other sections 6.4

Observe protective provisions (see section 7 and 8).

SECTION 7: Handling and storage

People who suffer from skin sensitazion problems, asthma, allergies, chronic or recurring respiratory illnesses should not be deployed in any process using this preparation.

People who spray this preparation should have regular pulmonary function tests.

7.1. Precautions for safe handling

Advices on safe handling

Avoid formation of flammable and explosive vapour concentrations in the air and exceeding the exposure limit values. Only use the material in places where open light, fire and other flammable sources can be kept away. Electrical equipment must be protected meeting the accepted standard. Product may become electrostatically charged. Provide earthing of containers, equipment, pumps and ventilation facilities. Anti-static clothing including shoes are recommended. Floors must be electrically conductive. Be careful when opening used containers (excess pressure). Precautionary measures should be taken in order to reduce strain from humidity or water: CO2 is formed which may produce excess pressure in closed containers . Keep away from heat sources, sparks and open flames. Use only spark proof tools. Avoid contact with skin, eyes and clothes. Do not inhale dusts, particulates and spray mist when using this preparation. Avoid respiration of swarf. When using do not eat, drink or smoke. Personal protection equipment: refer to section 8. Do not empty containers with pressure - no pressure vessel! Always keep in containers that correspond to the material of the original container. Follow the legal protection and safety regulations.

Further information

Vapours are heavier than air. Vapours form explosive mixtures with air.

Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSiVO). Soils have to conform to the "Guidelines for avoidance of ignition hazards due to electrostatic charges (TRBS 2153)".

Hints on joint storage

Do not store together with: Reducing agent, Acids, Alkali (Iye)

Further information on storage conditions

Take care of instructions on label. Store in a well-ventilated and dry room at temperatures between 15 °C and 30 °C. Protect from heat and direct sunlight. Keep container tightly closed. Remove all sources of ignition. Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks. Keep container tightly closed.

Specific end use(s)

Observe technical data sheet.

SECTION 8: Exposure controls/personal protection

People who suffer from skin sensitazion problems, asthma, allergies, chronic or recurring respiratory illnesses should not be deployed in any process using this preparation.

People who spray this preparation should have regular pulmonary function tests.

according to Regulation (EC) No. 1907/2006 (REACH)

according to Regulation (EU) 2015/830

40 27289 03084 5 Härter für Article No :

Print date: 23.04.2019 Revision date: 17.04.2019 31390 EN Version: Issue date: 05.07.2018 Page 4 / 9



8.1. **Control parameters**

Occupational exposure limit values:

n-butyl acetate

INDEX No. 607-025-00-1 / EC No. 204-658-1 / CAS No. 123-86-4

MEL/OES, TWA: 724 mg/m3; 150 ppm MEL/OES, STEL: 966 mg/m3; 200 ppm

2-methoxy-1-methylethyl acetate

INDEX No. 607-195-00-7 / EC No. 203-603-9 / CAS No. 108-65-6

WEL, TWA: 274 mg/m3; 50 ppm WEL, STEL: 548 mg/m3; 100 ppm

2-butoxyethyl acetate

INDEX No. 607-038-00-2 / EC No. 203-933-3 / CAS No. 112-07-2

WEL. TWA: 133 mg/m3: 20 ppm WEL, STEL: 332 mg/m3; 50 ppm

Remark: (May be absorbed through the skin.)

Additional information

TWA: long-term occupational exposure limit value STEL: short-term occupational exposure limit value

Ceiling: peak limitation

8.2. Exposure controls

Provide good ventilation. This can be achieved with local or room suction. When spraying, wear self-contained breathing apparatus. For other tasks a suitable respiratory system must be used, if local and room suction is not sufficient for keeping aerosol and solvent vapour concentration below the exposure limit values. (refer to Personal protection equipment.)

Personal protection equipment

Respiratory protection

If concentration of solvents is beyond the occupational exposure limit values, approved and suitable respiratory protection must be used. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190). Use only respiratory protection equipment with CE-symbol including four digit test number.

Hand protection

For prolonged or repeated handling the following glove material must be used: NBR (Nitrile rubber)

Thickness of the glove material 0,7 mm; Breakthrough time (maximum wearing time) 60 min.

Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin. Recommended glove articles EN ISO 374

Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

Eye/face protection

Wear closely fitting protective glasses in case of splashes.

Wear antistatic clothing of natural fibers (cotton) or heat resistant synthetic fibers.

Protective measures

After contact clean skin thoroughly with water and soap or use appropriate cleanser.

Environmental exposure controls

Do not allow to enter into surface water or drains. See section 7. No additional measures necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:

Physical state: Liquid Colour: refer to label Odour: characteristic **Odour threshold:** not determined pH at 20 °C: not determined Melting point/freezing point: not applicable

124 °C Initial boiling point and boiling range:

according to Regulation (EC) No. 1907/2006 (REACH) according to Regulation (EU) 2015/830



Article No.: 40 27289 03084 5 Härter für

Print date: 23.04.2019 Revision date: 17.04.2019 31390 EN Version: 1.3 Revision date: 05.07.2018 Page 5 / 9

Source: n-butyl acetate

Flash point: 28 °C

Evaporation rate: not determined

flammability

Burning time (s): not determined

Upper/lower flammability or explosive limits:

Lower explosion limit: 1,2 Vol-%
Upper explosion limit: 7,5 Vol-%
Vapour pressure at 20 °C: 10,7 mbar
Vapour density: not determined

Relative density:

Density at 20 °C: 0,96 g/cm³

Solubility(ies):

Water solubility (g/L) at 20 °C: insoluble

Partition coefficient: n-octanol/water: see section 12

Auto-ignition temperature: 315 °C

Decomposition temperature: not applicable Viscosity at 20 °C: 13 s 4 mm

Method: DIN 53211

Explosive properties: not applicable
Oxidising properties: not applicable

9.2. Other information

Solid content (%): 36,30 Wt %

solvent content:

Organic solvents: 63,70 Wt % Water: 0,00 Wt %

Solvent separation test (%): < 3 Wt % (ADR/RID)

SECTION 10: Stability and reactivity

10.1. Reactivity

No further relevant information available.

10.2. Chemical stability

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7. Hazardous decomposition byproducts may form with exposure to high temperatures.

10.5. Incompatible materials

No further relevant information available.

10.6. Hazardous decomposition products

Hazardous decomposition byproducts may form with exposure to high temperatures.e.g.:carbon dioxide, carbon monoxide, Hydrogen chloride (HCI), Hydrogen cyanide (hydrocyanic acid), Nitrogen oxides (NOx)

SECTION 11: Toxicological information

Classification according to Regulation (EC) No 1272/2008 [CLP]

11.1. Information on toxicological effects

Acute toxicity, calculated:

ATEmix calculated, oral: > 5000 mg/kg ATEmix calculated, dermal: > 5000 mg/kg ATEmix calculated, inhalative (vapours): > 20 mg/l

Acute toxicity

according to Regulation (EC) No. 1907/2006 (REACH) according to Regulation (EU) 2015/830



Article No.: 40 27289 03084 5 Härter für

Print date: 23.04.2019 Revision date: 17.04.2019 31390 EN Version: 1.3 Revision date: 05.07.2018 Page 6 / 9

2-methoxy-1-methylethyl acetate dermal, LD50, Rabbit: > 5000 mg/kg

inhalative (dust and mist), LC50, Rat: 35,7 mg/l (4 h) inhalative (vapours), LC50:, Rat: > 23,5 mg/kg (6 h)

n-butyl acetate

oral, LD50, Rat: 14000 mg/kg

inhalative (vapours), LC50, Rat: > 21 mg/l (4 h)

1,6-Hexamethylene diisocyanate homopolymer inhalative (vapours), LC50, Rat (4 h) Harmful if inhaled.

2-butoxyethyl acetate oral, LD50, Rat

Skin corrosion/irritation; Serious eye damage/eye irritation

Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation

May cause an allergic skin reaction.

1,6-Hexamethylene diisocyanate homopolymer Skin:

May cause an allergic skin reaction.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Based on available data, the classification criteria are not met.

STOT-single exposure; STOT-repeated exposure

May cause respiratory irritation.

May cause drowsiness or dizziness.

n-butyl acetate

Specific target organ toxicity (single exposure), drowsiness May cause drowsiness or dizziness.

1,6-Hexamethylene diisocyanate homopolymer Specific target organ toxicity (single exposure), Irritation May cause respiratory irritation.

Aspiration hazard

Based on available data, the classification criteria are not met.

Practical experience/human evidence

Inhaling of solvent components above the MWC-value can lead to health damage, e.g. irritation of the mucous membrane and respiratory organs, as well as damage to the liver, kidneys and the central nerve system. Indications for this are: headache, dizziness, fatigue, amyosthenia, drowsiness, in serious cases: unconsciousness. Solvents may cause some of the aforementioned effects through skin resorption. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and/or absorption through skin. Splashing may cause eye irritation and reversible damage.Because of the isocyanate components' properties of this and with consideration of similar preparations the following applies:This mixture may cause acute irritation and/or sensitization of airways which lead to tightness in thorax, short-breath and asthmatic complaints.After sensitization even concentrations below the exposure limit values may cause asthma.Repeated inhaling can lead to permanent illness of the respiratory tract.

Overall Assessment on CMR properties

The ingredients in this mixture do not meet the criteria for classification as CMR category 1A or 1B according to CLP.

SECTION 12: Ecological information

Classification according to Regulation (EC) No 1272/2008 [CLP] Do not allow to enter into surface water or drains.

12.1. Toxicity

2-methoxy-1-methylethyl acetate

Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): > 134 mg/l (96 h) Daphnia toxicity, EC50, Daphnia magna (Big water flea): 408 mg/l (48 h)

Fish toxicity, LC50:: 161 mg/l (96 h)

according to Regulation (EC) No. 1907/2006 (REACH)

according to Regulation (EU) 2015/830

Article No.: 40 27289 03084 5 Härter für

Print date: 23.04.2019 Revision date: 17.04.2019 31390 EN Version: 1.3 Revision date: 05.07.2018 Page 7 / 9



Long-term Ecotoxicity

2-methoxy-1-methylethyl acetate

Fish toxicity, NOEC, Oryzias latipes (Ricefish): 47,5 mg/l (14 d)

Daphnia toxicity, NOEC, Daphnia magna (Big water flea): > 100 mg/l (21 h)

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

2-methoxy-1-methylethyl acetate

Partition coefficient: n-octanol/water: 1,2

Bioconcentration factor (BCF)

No information available.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate disposal / Product

Recommendation

Do not allow to enter into surface water or drains. Handle contaminated packages in the same way as the substance itself. This material and its container must be disposed of in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

List of proposed waste codes/waste designations in accordance with EWC

080111* Waste paint and varnish containing organic solvents or other dangerous substances

*Hazardous waste according to Directive 2008/98/EC (waste framework directive).

Appropriate disposal / Package

Recommendation

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

SECTION 14: Transport information

14.1. UN number

UN 1263

14.2. UN proper shipping name

Land transport (ADR/RID): Paint related material

Sea transport (IMDG): PAINT RELATED MATERIAL

Air transport (ICAO-TI / IATA-DGR): Paint related material

14.3. Transport hazard class(es)

3

14.4. Packing group

Ш

14.5. Environmental hazards

Land transport (ADR/RID) not applicable
Marine pollutant not applicable

14.6. Special precautions for user

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.

Advices on safe handling: see parts 6 - 8

Further information

Land transport (ADR/RID)

according to Regulation (EC) No. 1907/2006 (REACH)

according to Regulation (EU) 2015/830

Article No.: 40 27289 03084 5 Härter für

Print date: 23.04.2019 Revision date: 17.04.2019 31390 EN Version: Issue date: 05.07.2018 Page 8 / 9

tunnel restriction code D/F

Sea transport (IMDG)

F-E. S-E FmS-No.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information

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

EU legislation

Directive 2010/75/EU on industrial emissions

VOC-value (in g/L): 619

National regulations

Restrictions of occupation

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Other regulations, restrictions and prohibition regulations

15.2. Chemical Safety Assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

EC No.	Designation	REACH No.
CAS No.		
204-658-1 123-86-4	n-butyl acetate	01-2119485493-29
500-060-2 28182-81-2	1,6-Hexamethylene diisocyanate homopolymer	01-2119485796-17
203-603-9 108-65-6	2-methoxy-1-methylethyl acetate	01-2119475791-29
203-933-3 112-07-2	2-butoxyethyl acetate	01-2119475112-47

SECTION 16: Other information

Full text of classification in section 3:

Flam. Liq. 3 / H226	Flammable liquids	Flammable liquid and vapour.
STOT SE 3 / H336	STOT-single exposure	May cause drowsiness or dizziness.
Acute Tox. 4 / H332	Acute toxicity (inhalative)	Harmful if inhaled.
Skin Sens. 1 / H317	Respiratory or skin sensitisation	May cause an allergic skin reaction.
STOT SE 3 / H335	STOT-single exposure	May cause respiratory irritation.
Acute Tox. 4 / H302	Acute toxicity (oral)	Harmful if swallowed.
Acute Tox. 4 / H312	Acute toxicity (dermal)	Harmful in contact with skin.

Classification procedure

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Flam. Liq. 3 Flammable liquids On basis of test data. Skin Sens. 1 Respiratory or skin sensitisation Calculation method. STOT SE 3 STOT-single exposure Calculation method. STOT SE 3 STOT-single exposure Calculation method.

Abbreviations and acronyms

ADR European Agreement concerning the International Carriage of Dangerous Goods by Road

OEL Occupational Exposure Limit Value

BLV Biological Limit Value CAS Chemical Abstracts Service

CLP Classification, Labelling and Packaging **CMR** Carcinogenic, Mutagenic and Reprotoxic

German Institute for Standardization / German industrial standard DIN

DNEL Derived No-Effect Level

EAKV European Waste Catalogue Directive

Effective Concentration EC **European Community** EC ΕN European Standard



according to Regulation (EC) No. 1907/2006 (REACH) according to Regulation (EU) 2015/830



40 27289 03084 5 Härter für Article No.:

Revision date: 17.04.2019 Print date: 23.04.2019 31390 EN Version: Issue date: 05.07.2018 Page 9 / 9

IATA-DGR International Air Transport Association – Dangerous Goods Regulations

IBC Code International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk ICAO-TI

International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous

Goods by Air

IMDG Code International Maritime Code for Dangerous Goods ISO International Organization for Standardization

LC Lethal Concentration

LD Lethal Dose

MARPOL Maritime Pollution: The International Convention for the Prevention of Pollution from Ships

OECD Organisation for Economic Cooperation and Development

PBT persistent, bioaccumulative, toxic **PNEC** Predicted No Effect Concentration

Registration, Evaluation, Authorisation and Restriction of Chemicals **REACH**

Regulations concerning the International Carriage of Dangerous Goods by Rail RID

UN **United Nations**

Volatile Organic Compounds VOC

vPvB very persistent and very bioaccumulative

Further information

Classification according to Regulation (EC) No 1272/2008 [CLP]

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations. Without written approval, the product must not be used for purposes different from those mentioned in chapter 1. It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations. The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.