

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

- **1.1 Product identifier**
- **Trade name: Haftvermittler / Adhesion Promoter V40**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Sector of Use**
SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
SU22 Professional uses: Public domain (administration, education, maintenance, services, craftsmen)
- **Product category** PC1 Adhesives, sealants
- **Process category** PROC10 Roller application or brushing
- **Environmental release category**
ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)
ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)
- **Application of the substance / the mixture** Adhesion promoter
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
merz+benteli ag
Freiburgstrasse 616
CH-3172 Niederwangen/Bern
Tel: +41 31 980 48 48
Fax: +41 31 980 48 49
E-mail: info@merz-benteli.ch
Web: www.merz-benteli.ch
- **Further information obtainable from:**
merz+benteli ag: Tel: +41(0)31 980 48 48
E-mail: info@merz-benteli.ch
- **1.4 Emergency telephone number:**
merz+benteli ag: Tel.: +41(0)31 980 48 48
National emergency phone number Switzerland: Tel.: +41 145
SwissToxicological Information center: Tel.: +41(0)44 251 51 51
E-mail: info@toxi.ch

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS08 health hazard

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.

(Contd. on page 2)

DE

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 02.07.2020

Version 2

Revision: 02.07.2020

Trade name: Haftvermittler / Adhesion Promoter V40

(Contd. of page 1)



GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

Skin Irrit. 2

H315 Causes skin irritation.

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



GHS05



GHS07



GHS08



GHS09

· Signal word Danger

· Hazard-determining components of labelling:

C7-C10 Isoalkane

toluene

· Hazard statements

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H336 May cause drowsiness or dizziness.

H304 May be fatal if swallowed and enters airways.

H411 Toxic to aquatic life with long lasting effects.

· Precautionary statements

P102 Keep out of reach of children.

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

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

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

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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

· 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 substances listed below with nonhazardous additions.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 02.07.2020

Version 2

Revision: 02.07.2020

Trade name: Haftvermittler / Adhesion Promoter V40

(Contd. of page 2)

Dangerous components:

CAS: 90622-56-3 EINECS: 292-458-5 Index number: 002-924-58-5 Reg.nr.: 01-2119471305-42-xxxx	C7-C10 Isoalkane Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; STOT SE 3, H336	≥75-≤100%
CAS: 1330-20-7 Index number: 601-022-00-9 Reg.nr.: 01-2119488216-32-xxxx	xylene Flam. Liq. 3, H226; STOT RE 2, H373; Asp. Tox. 1, H304; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319	≥2.5-<10%
CAS: 100-41-4 EINECS: 202-849-4 Index number: 601-023-00-4 Reg.nr.: 01-2119489370-35-xxxx	ethylbenzene Flam. Liq. 2, H225; STOT RE 2, H373; Asp. Tox. 1, H304; Acute Tox. 4, H332	1-<5%
CAS: 108-88-3 EINECS: 203-625-9 Index number: 601-021-00-3 Reg.nr.: 01-2119471310-51-xxxx	toluene Flam. Liq. 2, H225; Repr. 2, H361d; STOT RE 2, H373; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336	≥1-<3%

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

SECTION 4: First aid measures

· 4.1 Description of first aid measures

· **General information:**

Take affected persons out into the fresh air.
Immediately remove any clothing soiled by the product.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.
Wash with plenty of water or water and soap. In cases of sickness seek medical advice (show label if possible).

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:**

Do not induce vomiting; call for medical help immediately.
Rinse out mouth and then drink plenty of water.

· 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:**

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
CO₂, sand, extinguishing powder. Do not use water.

· **For safety reasons unsuitable extinguishing agents:** Water with full jet

· 5.2 Special hazards arising from the substance or mixture

Soot formation during the combustion.

· 5.3 Advice for firefighters

· **Protective equipment:** Wear self-contained respiratory protective device.

(Contd. on page 4)

Printing date 02.07.2020

Version 2

Revision: 02.07.2020

Trade name: Haftvermittler / Adhesion Promoter V40

(Contd. of page 3)

- **Additional information** Cool endangered receptacles with water spray.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Keep away from ignition sources.
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
- **6.2 Environmental precautions:**
Do not allow to enter sewers/ surface or ground water.
Keep contaminated washing water and dispose of appropriately.
Prevent from spreading (e.g. by damming-in or oil barriers).
- **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.
- **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.
- **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Fumes can combine with air to form an explosive mixture.
Protect against electrostatic charges.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store product only in tightly closed original containers.
Store in a cool and dry location.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:**
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.
- **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:**

108-88-3 toluene

AGW (Germany)	190 mg/m ³ , 50 ppm 4(II);DFG, EU, H, Y
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1330-20-7 xylene

AGW (Germany)	440 mg/m ³ , 100 ppm 2(II);DFG, EU, H
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(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 02.07.2020

Version 2

Revision: 02.07.2020

Trade name: Haftvermittler / Adhesion Promoter V40

(Contd. of page 4)

100-41-4 ethylbenzene

AGW (Germany)	Long-term value: 88 mg/m ³ , 20 ppm 2(II);DFG, H, Y, EU
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Ingredients with biological limit values:
108-88-3 toluene

BGW (Germany)	1.0 mg/l Untersuchungsmaterial: Vollblut Probennahmezeitpunkt: Expositionsende bzw. Schichtende Parameter: Toluol
	3.0 mg/l Untersuchungsmaterial: Urin Probennahmezeitpunkt: bei Langzeitexposition: Nach mehreren vorangegangenen Schichten, Expositionsende bzw. Schichtende Parameter: o-Kresol

1330-20-7 xylene

BGW (Germany)	1.5 mg/l Untersuchungsmaterial: Vollblut Probennahmezeitpunkt: Expositionsende bzw. Schichtende Parameter: Xylol
	2 g/l Untersuchungsmaterial: Urin Probennahmezeitpunkt: Expositionsende bzw. Schichtende Parameter: Methylhippur-(Tolur-)Säure

100-41-4 ethylbenzene

BGW (Germany)	250 mg/g Kreatinin Untersuchungsmaterial: Urin Probennahmezeitpunkt: Expositionsende bzw. Schichtende Parameter: Mandelsäure plus Phenoxyglyxylsäure
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· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

Do not eat, drink, smoke or sniff while working.

Wash hands before breaks and at the end of work.

· **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.

Filter AX

Use suitable respiratory protective device in case of insufficient ventilation.

· **Protection of hands:**



Protective gloves recommend

(Contd. on page 6)

DE

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 02.07.2020

Version 2

Revision: 02.07.2020

Trade name: Haftvermittler / Adhesion Promoter V40

(Contd. of page 5)

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

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

· **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.

Nitrile rubber, NBR

Butyl rubber, BR

Recommended thickness of the material: ≥ 0.5 mm

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **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:	Liquid
· Colour:	Colourless
· Odour:	Characteristic
· Odour threshold:	Not determined.

· **pH-value:** Not determined.

· **Change in condition**

· Melting point/freezing point:	Not determined.
· Initial boiling point and boiling range:	110 °C

· **Flash point:** 6 °C

· **Flammability (solid, gas):** Not determined.

· **Ignition temperature:** >200 °C

· **Decomposition temperature:** Not determined.

· **Auto-ignition temperature:** Product is not selfigniting.

· **Explosive properties:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

· **Explosion limits:**

· Lower:	0.7 Vol %
· Upper:	8.3 Vol %

· **Oxidising properties** Not determined.

· **Vapour pressure at 20 °C:** 16.3 hPa

· **Density at 20 °C:** 0.75 g/cm³

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 02.07.2020

Version 2

Revision: 02.07.2020

Trade name: Haftvermittler / Adhesion Promoter V40

(Contd. of page 6)

· 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.
· Solvent content: VOC (EC)	94.13 %
· 9.2 Other information	No further relevant information available.

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 and stored according to specifications.
- **10.3 Possibility of hazardous reactions** Forms explosive gas mixture with air.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** Avoid contact with other chemicals.
- **10.6 Hazardous decomposition products:** Possible in traces.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:**

1330-20-7 xylene

Oral	LD50	4,300 mg/kg (rat)
Dermal	LD50	2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	27.6 mg/l (rat)

90622-56-3 C7-C10 Isoalkane

Oral	LD50	>10,000 mg/kg (rat)
Dermal	LD50	>3,000 mg/kg (rat)
Inhalative	LC50/4 h	21 mg/l (rat)

108-88-3 toluene

Oral	LD50	5,000 mg/kg (rat)
Dermal	LD50	12,124 mg/kg (rabbit)
Inhalative	LC50/4 h	5,320 mg/l (mouse)

100-41-4 ethylbenzene

Oral	LD50	3,500 mg/kg (rat)
Dermal	LD50	17,800 mg/kg (rabbit)

- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes skin irritation.

(Contd. on page 8)

DE

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 02.07.2020

Version 2

Revision: 02.07.2020

Trade name: Haftvermittler / Adhesion Promoter V40

(Contd. of page 7)

- **Serious eye damage/irritation**
Causes serious eye damage.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure**
May cause drowsiness or dizziness.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard**
May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:**
1330-20-7 Xylene
LC50/96h: 3.77 mg/L (fish)
EC50/48h: 7.4 mg/L (daphnia magna)
EC50/72h: 10 mg/L (skelettonema costatum)
- **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 2 (German Regulation) (Self-assessment): hazardous for water
Danger to drinking water if even small quantities leak into the ground.
The product should not be released into the aquatic environment without preliminary treatments (biological purification plant).
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **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.

- **European waste catalogue**

08 04 99	wastes not otherwise specified
15 01 04	metallic packaging

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

DE

(Contd. on page 9)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 02.07.2020




Version 2

Revision: 02.07.2020

Trade name: Haftvermittler / Adhesion Promoter V40

(Contd. of page 8)

SECTION 14: Transport information

<ul style="list-style-type: none"> · 14.1 UN-Number · ADR, IMDG, IATA 	UN1993
<ul style="list-style-type: none"> · 14.2 UN proper shipping name · ADR · IMDG · IATA 	1993 FLAMMABLE LIQUID, N.O.S. (TOLUENE, XYLENES), special provision 640D 1993 Flammable liquid, n.o.s. (Alkanes, C7-C10-Iso-), Marine Pollutant 1993 Flammable liquid, n.o.s. (Alkanes, C7-C10-Iso-)
<ul style="list-style-type: none"> · 14.3 Transport hazard class(es) · ADR, IMDG 	<div style="display: flex; align-items: center; gap: 10px;">   </div> <ul style="list-style-type: none"> · Class · Label
<ul style="list-style-type: none"> · IATA 	<div style="display: flex; align-items: center; gap: 10px;">  </div> <ul style="list-style-type: none"> · Class · Label
<ul style="list-style-type: none"> · 14.4 Packing group · ADR, IMDG, IATA 	3 Flammable liquids. 3 II
<ul style="list-style-type: none"> · 14.5 Environmental hazards: · Marine pollutant: · Special marking (ADR): 	Yes Symbol (fish and tree) Symbol (fish and tree)
<ul style="list-style-type: none"> · 14.6 Special precautions for user · Hazard identification number (Kemler code): · EMS Number: 	Warning: Flammable liquids. 33 F-E, S-E
<ul style="list-style-type: none"> · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code 	Not applicable.
<ul style="list-style-type: none"> · Transport/Additional information: 	<ul style="list-style-type: none"> · ADR · Limited quantities (LQ) · Transport category · Tunnel restriction code
<ul style="list-style-type: none"> · IMDG · Limited quantities (LQ) 	1L 2 D/E 1L

(Contd. on page 10)

DE

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 02.07.2020

Version 2

Revision: 02.07.2020

Trade name: Haftvermittler / Adhesion Promoter V40

(Contd. of page 9)

- | | |
|---|--|
| <ul style="list-style-type: none"> · UN "Model Regulation": | UN1993, FLAMMABLE LIQUID, N.O.S.
(TOLUENE, XYLENES), special provision 640D, 3,
II |
|---|--|

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 200 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 48
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present 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.
- H304 May be fatal if swallowed and enters airways.
- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H336 May cause drowsiness or dizziness.
- H361d Suspected of damaging the unborn child.
- H373 May cause damage to the hearing organs through prolonged or repeated exposure.
- H411 Toxic to aquatic life with long lasting effects.

- **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 Organisation
 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
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 Flam. Liq. 2: Flammable liquids – Category 2
 Flam. Liq. 3: Flammable liquids – Category 3
 Acute Tox. 4: Acute toxicity - dermal – Category 4
 Skin Irrit. 2: Skin corrosion/irritation – Category 2
 Eye Dam. 1: Serious eye damage/eye irritation – Category 1
 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
 Repr. 2: Reproductive toxicity – Category 2
 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
 STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
 Asp. Tox. 1: Aspiration hazard – Category 1

(Contd. on page 11)

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

Printing date 02.07.2020

Version 2

Revision: 02.07.2020

Trade name: Haftvermittler / Adhesion Promoter V40

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

(Contd. of page 10)

· **Sources** Not available

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

DE