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1. Identification of the mixture and of the company/undertaking

1.1 Product identifier	
Commercial Product Name	raid hp Bremssattel-Lack Härter - Art. Nr.: 350011

1.2 Relevant identified uses of the mixture and uses advised against

Use as curing agent for paint or coating. At present we have no information on any use restrictions. Any new data will be added to this safety data sheet.

1.3 Details of the supplier of the safety data sheet

Company designation	raid hp Deutschland Autoteile + Vertriebs GmbH	
Street	Gahlenfeldstraße 36	
Country	D-58313 Herdecke	
	Section technolgy	
Telefon / Telefax	+49(0)2330-805550 / -805150	
E-Mail (competent person)	sdb-info@raid-rdi.com	

1.4 EMERGENCY TELEPHONE NUMBER

Giftinformationszentrum Nord -GIZ Nord +49(0)551 -19240 (accessable 24 hours)

2. Hazards identification

2.1 Classification of the mixture

Classification of the mixture according to Directive 67/548/EEC, 1999/45/EC

R10 Xn; R38 Xi; R20/21 R43 R65 R66

Supplemental Hazard information (EC)

2.2 Label elements according to Regulation 1999/45/EC Hazard symbol



Xn: Harmfull

Hazard components for labeling:

aliphatic polyisocyanat, xylene

R-phrases

R10	Flammable.
R38	Irritating to skin.
R20/21	Harmful by inhalation and in contact with skin.
R43	May cause sensitisation by skin contact.
R65	Harmful: may cause lung damage if swallowed.
R66	Repeated exposure may cause skin dryness or cracking.



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S-phrases

S16	Keep away from sources of ignition - No smoking.
S24	Avoid contact with skin.
S36/37	Wear suitable protective clothing and gloves.

2.3 Other hazards

3. Composition/information on ingredients

3.1 Mixture

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Hazardous ingredients	EC-No.	Classification 67/548/EWG	Concentration	
	CAS-No. Index-No. Reg.No.	Classification 1272/2008/EG		
aliphatic polyisocyanat		Xi; R 43 GHS07 Skin Sens. 1; H317	> 50%	
xylene	215-535-7 1330-20-7	R10 Xn; R20/21 Xi; R38 GHS02 Flam. Liq.; H226	25-50%	
		GHS07 Acute Tox. 4, H312 GHS07 Acute Tox. 4; H332 GHS07 Skin Irrit. 2; H315		
2-methoxy-1-methylethyl acetate	203-603-9 108-65-6 607-195-00-7	R10 GHS02 Flam. Liq.3; H226	5-10%	
ethylbenzene	202-849-4 100-41-4 601-023-00-4	F; R11 Xn; R20 GHS02 Flam. Liq. 2; H225 GHS 07 Acute Tox.; H332	1-3%	
hexamethylene-di-isocyanate	212-458-8 822-06-0 615-011-00-1	T; R23 R36/37/38 R42/43 GHS06 Acute Tox. 3, H331 GHS07 Eye Irrit. 2; H319 GHS07 STOT SE 3; H335 GHS07 Skin Irrit. 2; H315 GHS08 Resp. Sens. 1; H334 Skin Sens. 1; H317	<u>≤</u> 0,5 %	

(Full text of R-, H-phrases: see section 16)

4. First aid measures

4.1 Description of first aid measures

In case of inhalation

Provide fresh air.

Move victim to fresh air. Put victim at rest and keep warm. In case of irregular breathing or respiratory arrest provide artificial respiration. If victim is at risk of losing consciousness, position and transport on their side. Consult a physician in case of symptoms.

In case of skin contact

Immediately clean with water and soap and rinse down with water. Remove contaminated clothing immediately.

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In case of eye contact

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In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. If eye irritation persists: Get medical advice/attention.

In case of ingestion

Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention.

4.2 Most important symptoms and effects, both acute and delayed

4.3 Indication of any immediate medical attention and special treatment needed

5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Co-ordinate fire-fighting measures to the fire surroundings. Unsuitable extinguishing media: High power water jet.

5.2 Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases possible. Fire will produce dense black smoke. Inhaling hazardous decomposing products can cause serious health damage.

5.3 Advice for fire-fighters

In case of fire: Wear self-contained breathing apparatus. Use water spray jet to protect personnel and to cool endangered containers.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment. Keep away unprotected persons. Provide adequate ventilation. Keep away from sources of ignition. Do not breathe vapours.

6.2 Environmental precautions

Do not allow entering drains or surface/ground water.

6.3 Methods and material for containment and cleaning up

Provide adequate ventilation Do not rinse down with water. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Fouled surfaces must be immediately cleaned with suitable solvents. Suitable (flammable): water 45 Vol. % ethanol or isopropanol 50 Vol. % ammonia solution (density 0,88) 5 Vol.% Alternatively (not flammable): sodium 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.

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6.4 Reference to other sections

Information for handling and storage see point 7. Information for personal protection see point 8. Information for disposal see point 7.

7. Handling and storage

7.1 Precautions for safe handling

Wash hands and face before breaks and after work.

Avoid contact with skin and eyes.

Use only in well-ventilated areas. Provide for good room ventilation.

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. Product may become electrostatically charged. When transferring, earthed pipework shall be used exclusively. Anti-static clothing including shoes are recommended. Use only spark proof tools. Do not inhale vapours or mist.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Avoid high temperature and direct sun radiation. Solvent vapours are heavier than air and spread across the ground. Vapours form explosive mixtures with air.

Aerosol and dust generation preventions

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Environmental precautions

Advice on general occupational hygiene

Wash hands and face before breaks and after work. Keep out of the reach of children. In case of skin and eye contact immediately clean with plenty of warm water. Keep away from food, drink and animal feed stuffs. Take off immediately all contaminated clothing.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Electrical equipment must be explosion-protected. Floors must be electrically conductive. Keep container tightly closed. Never use pressure to empty container. Access only for authorised persons. Always keep in containers that correspond to the material of the original container. Keep original packaging tightly closed in a dry, cool, well-ventilated place. Avoid exposure to moisture or the water. Formation of CO2 in closed containers can result pressure. Opened containers must be carefully resealed and kept upright to prevent leakage. Avoid high temperature and direct sun radiation. Store between 5 °C and 35 °C in a dry and well-ventilated place.

Hints on storage assembly:

Keep away from strong acids, strong bases, strong oxidizing, amines, alcohols and water.

Storage class: LGK: Flammable liquids.

7.3 Specific end uses

Recommendations

Industrial sector specific solutions

Safety Data Sheet according to Regulation (EC) No 1907/2006 (REACH) raid hp Bremssattel-Lack Härter Art. Nr.: 350011 Revisions date: 01.10.2013



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8. Exposure controls/personal protection

8.1 Control parameters

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8.1.1 Occupational exposure limits

Substance; CAS-No.:	xylene; 1330-20-7		2-methoxy-1-methylethyl acetate; 108-65-1	
	Limit Value-Eight	Limit Value-Eight	Limit Value-Eight	Limit Value-Eight
	hours	hours	hours	hours
	ppm; mg/m³	ppm; mg/m³	ppm; mg/m³	ppm; mg/m³
Austria	50; 221	100; 442	50; 275	100; 550
Belgium	50; 221	100; 442	50; 275	100; 550
Denmark	25; 109	50; 218	50; 275	100; 550
EU	50; 221	100; 442	50; 275	100; 550
France	50; 221	100; 442	50; 275	100; 550
Hungary	-;221	-; 442	-; 275	-; 550
Ireland	50; 221	100; 442 (1)	50; 275	100; 550 (1)
Italy	50; 221	100; 442	50; 275	100; 550
Japan	50;-	-	-	-
Latvia	50; 221	100; 442 (1)	50; 275	100; 550 (1)
Poland	-; 100	-	-	-
Spain	50; 221	100; 442	50; 275	100; 550
Sweden	50; 221	100; 442 (1)	50; 250	75; 400 (1)
Switzerland	100; 435	200; 870	50; 275	100; 550
The Netherlands	-; 210	-; 442	-; 500	-
United Kingdom	50; 220	100; 440	50; 274	100; 548

(1) Ireland: 15 minutes reference period; Latvia: 15 minutes average value; Sweden: Short term value, 15 minutes average value

Substance; CAS-No.:	ethylbenzene;		hexamethylene-di-isocyanate;	
	100-41-4		822-06-0	
-	Limit Value-Eight	Limit Value-Eight	Limit Value-Eight	Limit Value-Eight
	hours	hours	hours	hours
	ppm; mg/m³	ppm; mg/m³	ppm; mg/m³	ppm; mg/m³
Austria	100; 440	200; 880	0,005; 0,035	0,005; 0,035
Belgium	100; 442	125; 551	0,005; 0,034	-
Denmark	50; 217	100; 434	0,005; 0,035	0,01; 0,07
EU	100; 442	200; 884	-	-
France	20; 88,4	100; 442	0,01; 0,075	0,01; 0,07
Hungary	-; 442	-; 884	-; 0,035	-; 0,035
Ireland	100; 442	200; 884 (1)	0,005; (1)	-
Italy	100; 442	200; 884	-; 1	-
Japan	-	-	-	-
Latvia	100; 442	200; 884 (1)	-; 0,05	-
Poland	-; 200	-; 400	-; 0,04	-; 0,08
Spain	100; 442	200; 884	0,005; 0,034	-
Sweden	50; 200	100; 450 (1)	0,002; 0,02	0,005; 0,03 (1)
Switzerland	100; 435	100; 435	-	-
The Netherlands	-; 215	-; 430	-	-
United Kingdom	100; 441	125; 552	-	-

(1) Ireland: 15 minutes reference period; Latvia: 15 minutes average value; Sweden: Short term value, 15 minutes average value



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8.1.2 DNEL/PNEC-values

Substance; CAS-No.:	DNEL	DNEL
	Long-term - inhalation, local	Long term - inhalations systemic
	effects	effects
xylene; 1330-20-7	221 mg/m ³	221 mg/m ³
2-methoxy-1-methylethyl acetate; 108-65-1	-	275 mg/m ³
ethylbenzene; 100-41-4	-	77 mg/m³
hexamethylene-di-isocyanate; 822-06-0	0,035 mg/m³	0,035 mg/m³

8.1.3 Risk management measures according to used control banding approach

Used model: -

8.2 Exposure controls

8.2.1 Appropriate engineering controls

8.2.2 Personal protective equipment

Eye / Face protection

Tightly sealed safety glasses.

Skin protection

-

Hand protection

By long-term hand contact

Suitable material: NBR (Nitrile rubber). Material thickness: 0,45 mm Break through time:> 240 min Breakthrough times and swelling properties of the material must be taken into consideration.

Other skin protection measures

Respiratory protection

In case of inadequate ventilation wear respiratory protection. In well-ventiladed rooms self-contained breathing apparatus may be replaced with combination filters. Type AX.

Thermal hazards

Not required.

Body protection

Wear anti-static footwear and clothing.

8.2.3 Environmental exposure controls

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9. Physical and chemical properties			
9.1 Information on basic physical and chemical properties			
Appearance			
-Physical state	Liquid.		
-Colour	Colourless.		
Odour	Characteristic.		
Odour threshold	-		
pH (20 °C)	-		
Melting point/range (°C)	-		
Initial boiling point/range (°C)	-		
Flash point (°C)	25 °C		
 Auto-ignition temperature (°c) 	-		
Vapourisation rate / Evaporation rate	-		
Flammability and burning behaviour	-		
of dust layers burning number (BZ)			
Explosion limits (LEL, UEL)	0,9 Vol%		
	10,80 Vol%		
	Formation of explosive/inflammable		
	vapours possible.		
Vapour pressure (hPa) at 20 °C)-	-		
Vapour density (air=1)	-		
Density (g/cm3) at 20 °C	0,95 g/m³		
Relative density (air = 1)	-		
Water solubility (20°C in g/l)	Immiscible with water.		
VOC-EU	41,25%		
Partition coefficient	-		
n-Octanol/Water (log Po/w)	-		
Self ignition temperature in °C	The product is not self-igniting.		
Decomposition temperature (°C)	-		
Viscosity, dynamic (mPa s)	Ca. 45 sec		
Explosives	-		

9.2 Additional information

-

10. Stability and reactivity

10.1 Reactivity

No further relevant information available.

10.2 Chemical stability

No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions

No dangerous reactions known.

10.4 Conditions to avoid

Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions. Amines and alcohols cause exothermic reactions. The mixture reacts slowly with water resulting in evolution of carbon dioxide; closed containers may burst.



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10.5 Incompatible materials

No further relevant information available.

10.6 Hazardous decomposition products

High temperatures may produce hazardous decomposition products, such as: carbon dioxide, carbon monoxide, smoke, nitrogen oxides, hydrocyanic acid, alcohol.

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

No further relevant information available.

Irritation

Irritation to skin.

Skin corrosion

No further relevant information available.

Sensitisation

May cause sensitisation by skin contact.

Repeated dose toxicity

No further relevant information available.

Carcinogenicity

No further relevant information available.

Mutagenicity

No further relevant information available.

Toxicity for reproduction

No further relevant information available.

Symptoms related to the physical, chemical and toxicological characteristics:

Due to the properties of the isocyanate components and considering similar preparations: This mixture may cause acute irritation and/or sensitization of airways which lead to tightness in thorax, short-breath and asthmatic complaints. Based on the properties of the epoxy constituents and considering toxicological data on similar preparations, this preparation may be a skin sensitiser and an irritant. It contains low molecular weight epoxy constituents which are irritating to eyes, mucous membrane and skin. After sensitization even concentrations below the exposure limit values may cause asthma. Inhaling of solvent components above the occupational exposure limits 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. Symptoms: headache, dizziness, fatigue, muscular weakness, drowsiness, narcotic effects and in extreme cases unconsciousness. Prolonged/repetitive skin contact may cause skin defattening or dermatitis. The product can then penetrate through the skin into the body. Splashes of the solvent may cause irritation and reversible damage.

11.2 Other information

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12. Ecological information

12.1 Toxicity Aquatic toxicity

Acute (short-term) fish toxicity

No further relevant information available.

Acute (short-term) daphnia toxicity

No further relevant information available.

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.

12.5 Results of PBT and vPvB-assessment

Not applicable.

12.6 Other adverse effects

Do not allow to enter into ground water, surface water or drains. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

13. Disposal considerations

13.1 Waste treatment methods

Treatment of contaminated packaging

No further relevant information available.

Waste codes / waste designations according to EWC / AVV

08 01 11* Waste paint and varnish containing organic solvents or other dangerous substances

Additional information

Do not empty into drains. Vessels not properly emptied are special waste.

14. Transport information

	Land transport (ADR/RID)	Marine- transport IMDG	Air transport ICAO- IATA
UN-No.	1263	1263	1263
Description of the goods	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL
Proper shipping name	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL
Class(es)	3	3	3
Packaging group	III	III	III
Environmental hazards	No	No	No
Classification Code	F1	F1	F1
Labels	3	3	3



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	Land transport (ADR/RID)	Marine- transport IMDG	Air transport ICAO- IATA
Tunnel restriction code	(D)	-	-
Danger releasing substance	xylene, ethylbenzene	xylene, ethylbenzene	xylene, ethylbenzene
Limited Quantities	5 L	5 L	-
EMS-No.	-	F-E,S-E	-
Marine Pollutant	No	No	No
Special precautions for user	-	-	-
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	-	-	-

15. Regulatory information

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

EU regulations

-

Other EU regulations

-

15.2 Chemical Safety Assessment

No information available, because for the substance no chemical safety report is required. The data so far as available are taken from the databases GESTIS / GESTIS International Limit Values, IUCLID respectively of external safety data sheets. This Safety Data Sheet was issued according to current EC guidelines. These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. The data is supposed to give advice for the safe handling of the mentioned product with regard to storage, processing, transport and waste disposal. The information cannot be applied to other products.

16. Other information

Indication of changes

Key literature references and sources for data

IFA GESTIS-Stoffdatenbank; IFA GESTIS International Limit Values, External safety data sheet.

Relevant R-, H- and EUH-phrases (number and full text)

According to directive 67/548/EEC

R10 Flammable.
R11 Highly flammable.
R20 Harmful by inhalation.
R20/21 Harmful by inhalation and in contact with skin.
R23 Toxic by inhalation.
R36 Irritating to eyes.
R36/37/38 Irritating to eyes, respiratory system and skin.
R38 Irritating to skin.
R42/43 May cause sensitisation by inhalation and skin contact.
R65 Harmful: may cause lung damage if swallowed.
R66 Repeated exposure may cause skin dryness or cracking.



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According to regulation (EC) No. 1272/2008

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.

H331 Toxic if inhaled.

H332 Harmful if inhaled.

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

H335 May cause respiratory irritation.

Training advice

-

Classification for mixtures and used evaluation method according to regulation (EC) No.1207/2008 [CLP]

Further information

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) CAS: Chemical Abstracts Service **DNEL: Derived No-Effect Level** EC: European Community EN: Europäische Norm (European Standard) IATA-DGR: International Air Transport Association-Dangerous Goods Regulations IBC: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk (IBC Code) ICAO-TI: International Civil Aviation Organization-Technical Instructions IMDG-Code: International Maritime Code for Dangerous Good ISO: International Organization for Standardization IUCLID: International Uniform Chemical Information Database LC50: Lethal concentration, 50 percent LD50: Lethal dosis, 50 percent log Pow: n-octanol/water distribution coefficient MARPOL: Maritime Pollution Convention PBT: Persistent, Bio-Accumulative and Toxic PNEC: Predicted No-Effect Concentration RID: Règlement concernant le transport international ferroviaire de marchandises Dangereuses UN: United Nations VOC: Volatile Organic Compounds) vPvB: Very persistent, very bio-accumulative