SAFETY DATA SHEET

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

1.1. Product identifier

Trade name
PU Adhesive and Sealant
Product no.
5-113/115-0310
REACH registration number
Not applicable

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

Relevant identified uses of the substance or mixture
Bodywork protector treatment. Only for professional use.
Uses advised against
-
The full text of any mentioned and identified use categories are given in section 16

1.3. Details of the supplier of the safety data sheet

Company and address
August Handel GmbH
Heinrich-Hertz-Str. 3b
DE-14532 Kleinmachnow b. Berlin
Germany
Phone: +49 30 217333 00
Contact person
-
E-mail
info@augusthandel.com
SDS date
2017-06-23
SDS Version
1.0

1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service). See section 4 “First aid measures”.

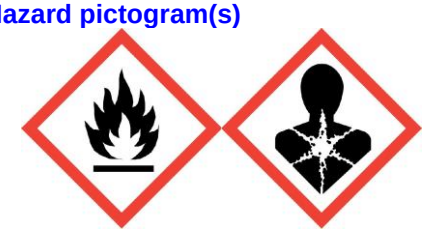
SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Flam. Liq. 2; H225
Flam. Liq. 3; H226
Resp. Sens. 1; H334
See full text of H-phrases in section 2.2.

2.2. Label elements

Hazard pictogram(s)



Signal word
Danger
Hazard statement(s)
Highly flammable liquid and vapour. (H225)
Flammable liquid and vapour. (H226)

Safety statement(s)

General	If medical advice is needed, have product container or label at hand. (P101). Keep out of reach of children. (P102).
Prevention	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. (P210).
Response	In case of fire: Use alcohol-resistant foam/carbonic acid/powder/water mist/carbon dioxide/dry sand to extinguish. (P370+P378).
Storage	Store in a well-ventilated place. Keep cool. (P403+P235).
Disposal	Dispose of contents/container to an approved waste disposal plant. (P501).

Identity of the substances primarily responsible for the major health hazards

-

2.3. Other hazards

Additional labelling

Persons already sensitised to — Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product. — This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used. Contains DIPHENYLMETHANDIISOCYANATE, ISOMERS AND HOMOLOGUES. May produce an allergic reaction. (EUH208).Do not use in paint spraying equipment.

Additional warnings

-

VOC

-

SECTION 3: Composition/information on ingredients

3.1/3.2. Substances/Mixtures

NAME:	xylene
IDENTIFICATION NOS.:	CAS-no: 1330-20-7 EC-no: 215-535-7 Index-no: 601-022-00-9
CONTENT:	0-8,5%%
CLP CLASSIFICATION:	Flam. Liq. 3, Acute Tox. 4, STOT RE 2, STOT SE 3, Skin Irrit. 2, Asp. Tox. 1 H226, H304, H312, H315, H332, H335, H373
NOTE:	SL

NAME:	Aromatic hydrocarbons, C8
IDENTIFICATION NOS.:	CAS-no: 90989-38-1 EC-no: 292-694-9
CONTENT:	0-8,5%%
CLP CLASSIFICATION:	Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Asp. Tox. 1, STOT RE 2, Eye Irrit. 2, Skin Irrit. 2, STOT SE 3 H226, H312, H332, H304, H373, H319, H315, H335

NAME:	reaction mass of ethylbenzene and m-xylene and p-xylene
IDENTIFICATION NOS.:	EC-no: 905-562-9
CONTENT:	0-8,5%%
CLP CLASSIFICATION:	Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Asp. Tox. 1, STOT RE 2, Eye Irrit. 2, Skin Irrit. 2, STOT SE 3 H226, H312, H332, H304, H373, H319, H315, H335

NAME:	ethyl acetate
IDENTIFICATION NOS.:	CAS-no: 141-78-6 EC-no: 205-500-4 Index-no: 607-022-00-5
CONTENT:	1-1,15%%
CLP CLASSIFICATION:	Flam. Liq. 2, STOT SE 3, Eye Irrit. 2 H225, H319, H336
NOTE:	S

NAME:	DIPHENYLMETHANDIISOCYANATE, ISOMERS AND HOMOLOGUES
IDENTIFICATION NOS.:	CAS-no: 9016-87-9 EC-no: 618-498-9
CONTENT:	0,8-0,9%%
CLP CLASSIFICATION:	STOT RE 2, STOT SE 3, Eye Irrit. 2, Resp. Sens. 1, Skin Sens. 1, Carc. 2, Acute Tox. 4 H317, H319, H334, H335, H351, H373, H332

(*) See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.
S = Organic solvent L = European occupational exposure limit.

Other information

ATEmix(inhale, vapour) > 20

ATEmix(dermal) > 2000
Eye Cat. 2 Sum = Sum(Ci/S(G)CLi) = 0,08 - 0,12
Skin Cat. 2 Sum = Sum(Ci/S(G)CLi) = 0,64 - 0,96

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. The doctor can contact The National Poisons Information Service (dial 111, 24 h service). Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Bring the person into fresh air and stay with him.

Skin contact

Immediately remove contaminated clothing and shoes. Ensure that skin, which has been exposed to the material, is washed thoroughly with soap and water. Skin cleanser can be used. DO NOT use solvents or thinners.

Eye contact

Remove contact lenses. Flush eyes immediately with plenty of water or isotonic water (20-30°C) for at least 15 minutes and continue until irritation stops. Make sure to flush under the upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

Ingestion

Provide plenty of water for the person to drink and stay with him/her. In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the victim lean forward with head down to avoid inhalation of- or choking on vomited material.

Burns

Rinse with water until the pain stops then continue to rinse for a further 30 minutes.

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

This product contains substances that may trigger an allergic reaction to predisposed persons. Sensitisation: This product contains substances, which may produce an allergic reaction through inhalation. The allergic reaction is typically taking place within an hour subsequent to exposure. The reaction results in an inflammatory reaction to the lungs.

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

Nothing special

Information to medics

Bring this safety data sheet.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Recommended: alcohol-resistant foam, carbonic acid, powder, water mist. Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous catabolic substances are produced. These are: Carbon oxides. Fire will result in dense black smoke. Exposure to combustion products may harm your health. Fire fighters should wear appropriate protection equipment. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

5.3. Advice for firefighters

No specific requirements.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure sufficient ventilation.

6.2. Environmental precautions

No specific requirements.

6.3. Methods and material for containment and cleaning up

Use sand, sawdust, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations. To the extent possible cleaning is performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section on “Disposal considerations” in regard of handling of waste. See section on 'Exposure controls/personal protection' for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid static electricity. Protect electrical equipment in accordance with current standards. To divert static electricity during transmission, containers must be grounded and connected by wire with the receiving containers. Do not use spark-forming tools.
Smoking, storage of tobacco, consumption and storage of food or liquids are not allowed in the workrooms. See section on 'Exposure controls/personal protection' for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Always store in containers of the same material as the original container. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Must be stored in a cool and well-ventilated area, away from possible sources of ignition.

Storage temperature

Room temperature 18 to 23°C

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

OEL

ethyl acetate
Long-term exposure limit (8-hour TWA reference period): 200 ppm | - mg/m³
Short-term exposure limit (15-minute reference period): 400 ppm | - mg/m³

xylene
Long-term exposure limit (8-hour TWA reference period): 50 ppm | 220 mg/m³
Short-term exposure limit (15-minute reference period): 100 ppm | 441 mg/m³
Comments: Sk BMGV (Bmgv = Biological Monitoring Guidance Value. Sk = Can be absorbed through skin.)

DNEL / PNEC

DNEL (xylene): 180 mg/kg
Exposure: Dermal
Duration of Exposure: Long term – Systemic effects - Workers
DNEL (xylene): 289 mg/m3
Exposure: Inhalation
Duration of Exposure: Short term – Systemic effects - Workers
DNEL (xylene): 289 mg/m3
Exposure: Inhalation
Duration of Exposure: Short term – Local effects - Workers
DNEL (xylene): 77 mg/m3
Exposure: Inhalation
Duration of Exposure: Long term – Systemic effects - Workers
DNEL (xylene): 77 mg/m3
Exposure: Inhalation
Duration of Exposure: Long term – Local effects - Workers
DNEL (ethyl acetate): 63 mg/kg
Exposure: Dermal
Duration of Exposure: Long term – Systemic effects - Workers
DNEL (ethyl acetate): 1468 mg/m3
Exposure: Inhalation
Duration of Exposure: Short term – Systemic effects - Workers
DNEL (ethyl acetate): 734 mg/m3
Exposure: Inhalation
Duration of Exposure: Long term – Systemic effects - Workers
DNEL (ethyl acetate): 734 mg/m3
Exposure: Inhalation
Duration of Exposure: Long term – Local effects - Workers
DNEL (ethyl acetate): 1468 mg/m3
Exposure: Inhalation
Duration of Exposure: Short term – Local effects - Workers

PNEC (xylene): 0,327 mg/l
Exposure: Freshwater
PNEC (xylene): 12,46 mg/kg
Exposure: Freshwater sediment
PNEC (xylene): 2,31 mg/kg
Exposure: Soil
PNEC (xylene): 6,58 mg/l
Exposure: Sewage Treatment Plant
PNEC (ethyl acetate): 0,24 mg/l
Exposure: Freshwater
PNEC (ethyl acetate): 0,024 mg/l
Exposure: Marine water
PNEC (ethyl acetate): 1,65 mg/l
Exposure: Intermittent release
PNEC (ethyl acetate): 1,15 mg/kg
Exposure: Freshwater sediment
PNEC (ethyl acetate): 0,115 mg/kg
Exposure: Marine water sediment
PNEC (ethyl acetate): 650 mg/l
Exposure: Sewage Treatment Plant

8.2. Exposure controls

Compliance with the accepted occupational exposure limits values should be controlled on a regular basis.

General recommendations

Observe general occupational hygiene standards.

Exposure scenarios

In the event exposure scenarios are appended to the safety data sheet, the operational conditions and risk management measures in these shall be complied with.

Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures

Airborne gas and dust concentrations must be kept at a minimum and below current limit values (see above). Installation of an exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure emergency eyewash and -showers are clearly marked.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

Measures to avoid environmental exposure

No specific requirements.

Individual protection measures, such as personal protective equipment

Generally

Use only CE marked protective equipment.

Respiratory Equipment

Recommended: Combination filter A2P3. Class 2/3. Brown/White

Skin protection

Wear appropriate protection clothing, e.g. coveralls in polypropylene approved type 6 and Category III.

Hand protection

Recommended: Natural rubber (latex)

Eye protection

No specific requirements.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	Pasta
Colour	No data available.
Odour	Characteristic
Odour threshold (ppm)	No data available.
pH	No data available.

Viscosity (40°C)	50000- 110000 cps
Density (g/cm³)	1,26
Phase changes	
Melting point (°C)	No data available.
Boiling point (°C)	No data available.
Vapour pressure	No data available.
Decomposition temperature (°C)	No data available.
Evaporation rate (n-butylacetate = 100)	No data available.
Data on fire and explosion hazards	
Flash point (°C)	0-200
Ignition (°C)	No data available.
Auto flammability (°C)	250
Explosion limits (% v/v)	No data available.
Explosive properties	No data available.
Solubility	
Solubility in water	Soluble
n-octanol/water coefficient	No data available.

9.2. Other information

Solubility in fat (g/L)	No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

The product is stable under the conditions, noted in the section “Handling and storage”.

10.3. Possibility of hazardous reactions

Nothing special

10.4. Conditions to avoid

Avoid static electricity.

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Substance	Species	Test	Route of exposure	Result
DIPHENYLMETHANDIISOCYA	Rat	LD50	Oral	>10000 mg/kg
NATE, IS...	Rabbit	LD50	Dermal	>9400 mg/kg
DIPHENYLMETHANDIISOCYA	Rat	LC50	Inhalation	0,31 mg/l/4h
NATE, IS...	Rat	LD50	Oral	6100 mg/kg
DIPHENYLMETHANDIISOCYA	Rabbit	LD50	Dermal	> 20000 mg/kg
NATE, IS...	Rat	LC50	Inhalation	58 mg/l
ethyl acetate	Mouse	LD50	Oral	5627 mg/kg
ethyl acetate	Rabbit	LD50	Dermal	>5000 ml/kg
ethyl acetate	Rat	LC50	Inhalation	6700 ppm/4h
reaction mass of ethylbenzene	Mouse	LD50	Oral	5627 mg/kg
...	Rabbit	LD50	Dermal	>5000 ml/kg
reaction mass of ethylbenzene	Rat	LC50	Inhalation	6700 ppm/4h
...	Rat	LD50	Oral	4300 mg{kg
reaction mass of ethylbenzene	Rabbit	LD50	Dermal	2000 mg{kg
...	Rat	LC50	Inhalation	22,1 mg/m3
Aromatic hydrocarbons, C8				
Aromatic hydrocarbons, C8				
Aromatic hydrocarbons, C8				
xylene				
xylene				
xylene				

Skin corrosion/irritation

No data available.

Serious eye damage/irritation

No data available.

Respiratory or skin sensitisation

This product contains substances that may trigger an allergic reaction to predisposed persons.
Sensitisation: This product contains substances, which may produce an allergic reaction through inhalation. The allergic reaction is typically taking place within an hour subsequent to exposure. The reaction results in an inflammatory reaction to the lungs.

Germ cell mutagenicity

No data available.

Carcinogenicity

No data available.

Reproductive toxicity

No data available.

STOT-single exposure

No data available.

STOT-repeated exposure

No data available.

Aspiration hazard

No data available.

Long term effects

Carcinogenic effects: This product contains substances considered or proven to be carcinogenic. The substances are classified as carcinogenic or listed by the Danish Working Environment Authority as substances suspected of being carcinogenic. The substances are covered by the DWEA's regulations on work involving the risk of cancer. The carcinogenic effects may be triggered subsequent to exposure through inhalation, skin contact or ingestion.

SECTION 12: Ecological information

12.1. Toxicity

Substance	Species	Test	Duration	Result
DIPHENYLMETHANDIISOCYANATE, IS...				
DIPHENYLMETHANDIISOCYANATE, IS...	Fish	LC50	96h	>1000 mg/l
	Algae	EC50	72h	>1640 mg/l
ethyl acetate	Algae	EC50	72 h	> 100 mg/l
ethyl acetate	Daphnia	EC50	48 h	165 mg/l
ethyl acetate	Fish	LC50	96 h	212 mg/l
reaction mass of ethylbenzene	Fish	LC50	96h	2,6 mg/l
...	Algae	EC10	72h	1,9 mg/l
reaction mass of ethylbenzene	Fish	LC50	96h	2,6 mg/l
...	Algae	EC10	72h	1,9 mg/l
Aromatic hydrocarbons, C8	Daphnia	EC50	24 h	96 mg/l
Aromatic hydrocarbons, C8	Daphnia	EC50	48 h	>1 - 10 mg/l
xylene	Algae	IC50	72 h	2,2 mg/l
xylene	Fish	LC50	96 h	13,5 mg/l
xylene				
xylene				

12.2. Persistence and degradability

Substance	Biodegradability	Test	Result

No data available.

12.3. Bioaccumulative potential

Substance	Potential bioaccumulation	LogPow	BCF

No data available.

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

Contains epoxy compounds. See information supplied by the manufacturer.

12.6. Other adverse effects

Nothing special

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste.

Waste

EWC code

-

Specific labelling

-

Contaminated packing

Contaminated packaging must be disposed of similarly to the product.

SECTION 14: Transport information

14.1 – 14.4

This product is within scope of the regulations of transport of dangerous goods.

ADR/RID

14.1. UN number	-
14.2. UN proper shipping name	-
14.3. Transport hazard class(es)	-
14.4. Packing group	-
Notes	-
Tunnel restriction code	-

IMDG

UN-no.	-
Proper Shipping Name	-
Class	-
PG*	-
EmS	-
MP**	-
Hazardous constituent	-

IATA/ICAO

UN-no.	-
Proper Shipping Name	-
Class	-
PG*	-

14.5. Environmental hazards

-

14.6. Special precautions for user

-

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

No data available

(*) Packing group
(**) Marine pollutant

SECTION 15: Regulatory information

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

Restrictions for application

People under the age of 18 shall not be exposed to this product cf. Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.
Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

Demands for specific education

-

Additional information

-

Sources

Council Directive 92/85/EEC on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding.
Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677. The Stationery Office, 2002.
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (CLP).
EC regulation 1907/2006 (REACH).

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

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.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
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.
H373 - May cause damage to organs through prolonged or repeated exposure¤.

The full text of identified uses as mentioned in section 1

-

Additional label elements

-

Other

In accordance with Regulation (EC) No. 1272/2008 (CLP) the evaluation of the classification of the mixture is based on:
The classification of the mixture in regard of physical hazards has been based on experimental data.
It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.
The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.
A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The safety data sheet is validated by

JW

Date of last essential change (First cipher in SDS version)

-

Date of last minor change (Last cipher in SDS version)

-