acc. to OSHA HCS

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1 Identification

- · Product identifier
- · Trade name: Senner Ausbesserungslack
- · Application of the substance / the mixture Paint
- Details of the supplier of the safety data sheet
- · Manufacturer/Supplier: Farben Senner e.K.

Bierwiesenstr. 26 72770 Reutlingen

Tel.: +49 (0)7072/923551 Fax: +49 (0)7072/923552 info@farben-senner.de www.farben-senner.de

· Emergency telephone number: Vergiftungs-Informations-Zentrale Freiburg, Tel. +49 761 19240

2 Hazard(s) identification

· Classification of the substance or mixture



GHS02 Flame

Flammable Liquids 3

H226 Flammable liquid and vapor.



GHS07

Specific Target Organ Toxicity - Single Exposure 3 H336 May cause drowsiness or dizziness.

- · Label elements
- · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms





GHS02

GHS07

- · Signal word Warning
- · Hazard-determining components of labeling:

n-Butyl acetate

2-Methoxy-1-methylethyl acetate Hydrocarbons, C9, aromatics

· Hazard statements

H226 Flammable liquid and vapor. H336 May cause drowsiness or dizziness.

· Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

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/shower.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a poison center/doctor if you feel unwell.

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· Classification system:

· NFPA ratings (scale 0 - 4)



· HMIS-ratings (scale 0 - 4)



- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · **Description:** Mixture of the substances listed below with nonhazardous additions.

· Dangerous	Dangerous components:		
123-86-4	n-Butyl acetate	25-50%	
108-65-6	2-Methoxy-1-methylethyl acetate	2.5-<10%	
64742-95-6	Hydrocarbons, C9, aromatics	1-<2.5%	
112-07-2	2-Butoxyethyl acetate	1-<2.5%	

4 First-aid measures

- · Description of first aid measures
- General information: Immediately remove any clothing soiled by the product.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Immediately rinse with water.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

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6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures
- Wear protective equipment. Keep unprotected persons away.
- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · 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 section 13.

Ensure adequate ventilation.

· 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.

· Protective Action Criteria for Chemicals

123-86-4	n-Butyl acetate	5 ppm
108-65-6	2-Methoxy-1-methylethyl acetate	50 ppm
7727-43-7	Barium sulfate, natural	15 mg/m^3
1309-37-1	Diiron trioxide	15 mg/m³
112-07-2	2-Butoxyethyl acetate	15 ppm
1330-20-7		130 ppm
112945-52-5	Silicon dioxide	18 mg/m^3
1333-86-4	Carbon black	9 mg/m³
34590-94-8	Dipropylene glycol monomethyl ether	150 ppm
100-41-4	Ethylbenzene	33 ppm
	methyl methacrylate	17 ppm
	n-butyl methacrylate	19 mg/m³
78-83-1	Isobutanol	150 ppm
50-00-0	formaldehyde	0.90 ppm
107-98-2	1-methoxy-2-propanol	100 ppm
14808-60-7	Quartz (SiO2)	0.075 mg/r
540-97-6	Dodecamethylcyclohexasiloxane	150 mg/m ³
556-67-2	octamethylcyclotetrasiloxane	30 ppm
PAC-2:		
123-86-4	n-Butyl acetate	200 ppm
108-65-6	2-Methoxy-1-methylethyl acetate	1,000 ppm
7727-43-7	Barium sulfate, natural	170 mg/m ³
1309-37-1	Diiron trioxide	360 mg/m ³
112-07-2	2-Butoxyethyl acetate	35 ppm
1330-20-7	Xylene	920* ppm
112945-52-5	Silicon dioxide	100 mg/m ³
1333-86-4	Carbon black	99 mg/m³
34590-94-8	Dipropylene glycol monomethyl ether	1700* ppn
100-41-4	Ethylbenzene	1100* ppn
80-62-6	methyl methacrylate	120 ppm
	n-butyl methacrylate	210 mg/m³
78-83-1	Isobutanol	1,300 ppm

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		(Contd. of page
	formaldehyde	14 ppm
107-98-2	1-methoxy-2-propanol	160 ppm
14808-60-7	Quartz (SiO2)	33 mg/m ³
540-97-6	Dodecamethylcyclohexasiloxane	1,700 mg/m ⁻
556-67-2	octamethylcyclotetrasiloxane	68 ppm
PAC-3:		·
123-86-4	n-Butyl acetate	3000* ppm
108-65-6	2-Methoxy-1-methylethyl acetate	5000* ppm
7727-43-7	Barium sulfate, natural	990 mg/m^3
1309-37-1	Diiron trioxide	2,200 mg/m
112-07-2	2-Butoxyethyl acetate	210 ppm
1330-20-7	Xylene	2500* ppm
112945-52-5	Silicon dioxide	630 mg/m^3
1333-86-4	Carbon black	590 mg/m^3
34590-94-8	Dipropylene glycol monomethyl ether	9900** ppm
100-41-4	Ethylbenzene	1800* ppm
80-62-6	methyl methacrylate	570 ppm
97-88-1	n-butyl methacrylate	1,300 mg/m
78-83-1	Isobutanol	8000* ppm
50-00-0	formaldehyde	56 ppm
107-98-2	1-methoxy-2-propanol	660 ppm
14808-60-7	Quartz (SiO2)	200 mg/m^3
540-97-6	Dodecamethylcyclohexasiloxane	9,900 mg/m
556-67-2	octamethylcyclotetrasiloxane	130 ppm

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Use only in well ventilated areas.

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · 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: Store away from foodstuffs.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Storage class: 3
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

· Additional information about design of technical systems: No further data; see section 7.

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· Control parameters

· Components with limit values that require monitoring at the workplace:

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At this time, the remaining constituent has no known exposure limits.

123-86	123-86-4 n-Butyl acetate			
PEL	Long-term value: 710 mg/m³, 150 ppm			
REL	REL Short-term value: 950 mg/m³, 200 ppm Long-term value: 710 mg/m³, 150 ppm			
TLV	Short-term value: 150 ppm Long-term value: 50 ppm			
108-63	5-6 2-Methoxy-1-methylethyl acetate			
WEEL	WEEL Long-term value: 50 ppm			
112-07	112-07-2 2-Butoxyethyl acetate			
REL	Long-term value: 33 mg/m³, 5 ppm			
TLV	Long-term value: 20 ppm A3			

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

· Breathing equipment:

Not required.



In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· Protection of hands:

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



Protective gloves

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.

Breakthrough 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.

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· Eye protection:



Tightly sealed goggles

y Pl	nysic	al and	cn	em	ıca	ı p	rop	eri	ties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Fluid

Color: According to product specification

Characteristic · Odor: Not determined. · Odor threshold:

· pH-value: Not determined.

· Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 124-128 °C (255.2-262.4 °F)

· Flash point: 26 °C (78.8 °F) (DIN 53213)

Flammable. · Flammability (solid, gaseous):

315 °C (599 °F) (DIN 51794) · Auto igniting:

· Decomposition temperature: Not determined.

Product is not selfigniting. · Ignition temperature:

· Danger of explosion: Product is not explosive. However, formation of explosive air/vapor

mixtures are possible.

· Explosion limits:

Lower: 1.2 Vol % 7.5 Vol % Upper:

· Vapor pressure at 20 °C (68 °F): 10.7 hPa (8 mm Hg) · Vapor pressure at 50 °C (122 °F): 55 hPa (41.3 mm Hg)

· Density at 20 °C (68 °F): 1.031 g/cm³ (8.604 lbs/gal) (DIN 53217)

· Relative density Not determined. Not determined. · Vapor density · Evaporation rate Not determined.

· Solubility in / Miscibility with

Not miscible or difficult to mix. Water:

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

Dynamic: Not determined.

Kinematic at 20 °C (68 °F): 100-150 s (DIN 53211/4)

· Solvent content:

51.39 % **VOC** content:

530 g/l / 4.4 lb/gal

Solids content (weight-%): 48.6 %

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· Other information

No further relevant information available.

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: Carbon monoxide

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- Primary irritant effect:
- on the skin: No irritant effect.
- · on the eve: No irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:
- · Carcinogenic categories

· IARC (International Agency for Research on Cancer)				
1309-37-1	Diiron trioxide	3		
14807-96-6	Talc	3		
1330-20-7	Xylene	3		
1333-86-4	Carbon black	2B		
100-41-4	Ethylbenzene	2B		
· NTP (Natio	· NTP (National Toxicology Program)			
50-00-0	formaldehyde	K		
14808-60-7	Quartz (SiO2)	K		
· OSHA-Ca (Occupational Safety & Health Administration)				
50-00-0 formaldehyde				

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- $\cdot \textit{Bioaccumulative potential No further relevant information available}.$
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.

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- · vPvB: Not applicable.
- $\cdot \textit{Other adverse effects} \ \textit{No further relevant information available}.$

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

Transport information		
UN-Number DOT, ADR, IMDG, IATA	UN1263	
UN proper shipping name DOT ADR IMDG, IATA	Paint UN1263 PAINT PAINT	
Transport hazard class(es)		
DOT		
RAMABLE UDUD		
Class	3 Flammable liquids	
Label	3	
Class	3 (F1) Flammable liquids	
Label	3	
IMDG, IATA		
Class	3 Flammable liquids	
Label	3	
Packing group DOT, ADR, IMDG, IATA	III	
Environmental hazards: Marine pollutant:	No	
Special precautions for user	Warning: Flammable liquids	
Hazard identification number (Kemle EMS Number:	er code): 30 F-E,S-E	

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· Stowage Category	A
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	5L
Remarks:	≤ 450 l: -
· IMDG	
· Limited quantities (LQ)	5L
Remarks:	<i>≤ 30 l: -</i>
· UN "Model Regulation":	UN 1263 PAINT, 3, III

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- ·Sara
- · Section 355 (extremely hazardous substances):

50-00-0 formaldehyde

Section 313 (Specific toxic chemical listings):

112-07-2 2-Butoxyethyl acetate

- Proposition 65
- · Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

- · Cancerogenity categories
- · TLV (Threshold Limit Value)

112-07-2 2-Butoxyethyl acetate

· NIOSH-Ca (National Institute for Occupational Safety and Health)

1333-86-4 Carbon black

50-00-0 formaldehyde

14808-60-7 Quartz (SiO2)

· GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms





GHS02

GHS07

- · Signal word Warning
- Hazard-determining components of labeling:

n-Butyl acetate

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A3 1-<2.5%

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2-Methoxy-1-methylethyl acetate Hydrocarbons, C9, aromatics

· Hazard statements

H226 Flammable liquid and vapor.

H336 May cause drowsiness or dizziness.

· Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

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/shower.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a poison center/doctor if you feel unwell.

- · National regulations:
- · Additional classification according to Decree on Hazardous Materials:

Class	Share in %
NK	50-100

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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.

- · Contact:
- · Date of preparation / last revision 02/28/2024
- · 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)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Flammable Liquids 3: Flammable liquids – Category 3

Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) - Category 3

* Data compared to the previous version altered.

USA