

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 12.07.2021

Version number 2

Revision: 10.12.2018

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

· **1.1 Product identifier**

- **Trade name:** FEYCOPUR 644 Härter langsam
- **UFI:** 0TD0-K0M6-Y00H-D9JH

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

No further relevant information available.

- **Application of the substance / the mixture** Hardening agent/ Curing agent

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

FEYCOLOR GmbH  
 Maxhüttenstraße 6  
 93055 Regensburg  
 Germany

Tel.: +49 (0) 941-60497-0

Fax: +49 (0) 941-60497-30

info@feycolor.com www.feycolor.com

Office hours:

Monday - Thursday: 08:00 - 12:00 und 13:00 - 16:00

Friday: 08:00 - 12:00

Email: sd@feycolor.com

www.feycolor.com

- **1.4 Emergency telephone number:** +49 (0) 700 24 11 21 12 (FCM)

### SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

- **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS07

Acute Tox. 4 H332 Harmful if inhaled.

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H335-H336 May cause respiratory irritation. 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



GHS07

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 12.07.2021

Version number 2

Revision: 10.12.2018

**Trade name:** FEYCOPUR 644 Härter langsam

(Contd. of page 1)

· **Signal word** Warning

· **Hazard-determining components of labelling:**

Hexamethylene diisocyanate, oligomers  
2-Butoxyethyl acetate  
2-Methoxy-1-methylethyl acetate  
n-Butyl acetate

· **Hazard statements**

H226 Flammable liquid and vapour.  
H332 Harmful if inhaled.  
H317 May cause an allergic skin reaction.  
H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

· **Precautionary statements**

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

· **Additional information:**

EUH204 Contains isocyanates. May produce an allergic reaction.  
Restricted to professional users.

· **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.

· **Dangerous components:**

CAS: 28182-81-2 NLP: 500-060-2 Reg.nr.: 01-2119485796-17	Hexamethylene diisocyanate, oligomers ⚠ Acute Tox. 4, H332; Skin Sens. 1, H317; STOT SE 3, H335	50-100%
CAS: 112-07-2 EINECS: 203-933-3 Reg.nr.: 01-2119475112-47	2-Butoxyethyl acetate ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332	10-25%
CAS: 108-65-6 EINECS: 203-603-9 Reg.nr.: 01-2119475791-29	2-Methoxy-1-methylethyl acetate ⚠ Flam. Liq. 3, H226; ⚠ STOT SE 3, H336	10-25%
CAS: 123-86-4 EINECS: 204-658-1 Reg.nr.: 01-2119485493-29	n-Butyl acetate ⚠ Flam. Liq. 3, H226; ⚠ STOT SE 3, H336	5-<10%

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

GB

(Contd. on page 3)

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

Printing date 12.07.2021

Version number 2

Revision: 10.12.2018

**Trade name:** FEYCOPUR 644 Härter langsam

(Contd. of page 2)

**SECTION 4: First aid measures**

· **4.1 Description of first aid measures**

· **General information:**

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

In case of irregular breathing or respiratory arrest provide artificial respiration.

· **After inhalation:**

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

· **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.

· **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:** CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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

· **5.2 Special hazards arising from the substance or mixture**

In case of fire, the following can be released:

Nitrogen oxides (NO<sub>x</sub>)

Carbon monoxide (CO)

Hydrogen cyanide (HCN)

· **5.3 Advice for firefighters**

· **Protective equipment:** Mouth respiratory protective device.

**SECTION 6: Accidental release measures**

· **6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

· **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

· **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.

Contain and collect spillages with non-combustible absorbent materials (e.g. sand, earth, diatomaceous earth) and place in a suitable container.

Decontaminate immediately with suitable mixture (flammable):

- as such usable (inflammatory!):

water 45 Vol.%

ethanol or isopropanol 50 Vol.%

ammonia solution (Density= 0.88) 5 Vol.%

- alternatively (non-flammable):

sodium carbonate 5 Vol.%

water 95 Vol.%

(Contd. on page 4)

**Safety data sheet**

according to 1907/2006/EC, Article 31

Printing date 12.07.2021

Version number 2

Revision: 10.12.2018

**Trade name:** FEYCOPUR 644 Härter langsam

(Contd. of page 3)

Add the same decontaminant to any residues and allow to stand for several days in a non-sealed container until no further reaction occurs. Once this stage is reached, close the container and dispose of in accordance with the waste regulations (see Section 13).

**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.
- Prevent formation of aerosols.
- Persons with a history of asthma, allergies or chronic or recurrent respiratory diseases should only be employed in processes in which this product is used under appropriate medical supervision.

**Information about fire - and explosion protection:**

- Keep ignition sources away - Do not smoke.
- Protect against electrostatic charges.

**7.2 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:**

- Do not store together with reducing agents, heavy-metal compounds, acids and alkalis.
- Store away from foodstuffs.

**Further information about storage conditions:**

- Keep container tightly sealed.
- Store separately from oxidising agents, strongly alkaline and strongly acidic materials, amines, alcohol and water.

**Storage class:** 3

**7.3 Specific end use(s)** No further relevant information available.

**SECTION 8: Exposure controls/personal protection**

**8.1 Control parameters**

**Additional information about design of technical facilities:** No further data; see item 7.

**Ingredients with limit values that require monitoring at the workplace:**

**28182-81-2 Hexamethylene diisocyanate, oligomers**

EBW	Short-term value: 0.5 mg/m <sup>3</sup> exposition evaluation value TRGS 430 (EBW)
-----	---

**112-07-2 2-Butoxyethyl acetate**

WEL	Short-term value: 332 mg/m <sup>3</sup> , 50 ppm Long-term value: 133 mg/m <sup>3</sup> , 20 ppm Sk
-----	---

**108-65-6 2-Methoxy-1-methylethyl acetate**

WEL	Short-term value: 548 mg/m <sup>3</sup> , 100 ppm Long-term value: 274 mg/m <sup>3</sup> , 50 ppm Sk
-----	--

(Contd. on page 5)

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

Printing date 12.07.2021

Version number 2

Revision: 10.12.2018

**Trade name:** FEYCOPUR 644 Härter langsam

(Contd. of page 4)

**123-86-4 n-Butyl acetate**

WEL	Short-term value: 966 mg/m <sup>3</sup> , 200 ppm Long-term value: 724 mg/m <sup>3</sup> , 150 ppm
-----	---

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

· **Personal protective equipment:**

All personal protective equipment, including respiratory protective equipment, used to control exposure to hazardous substances must be selected to meet the requirements of the COSHH Regulations.

· **General protective and hygienic measures:**

Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.

· **Respiratory protection:**

Filter A/P2 (EN 141, EN 143)



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.

· **Protection of hands:**



Protective gloves (EN 374)

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

· **Material of gloves**

Butyl rubber, BR

Recommended thickness of the material: ≥ 0.7 mm

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** Value for the permeation: Level ≤ 2

· **Eye protection:**



Tightly sealed goggles

**SECTION 9: Physical and chemical properties**

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

<b>Form:</b>	Fluid
<b>Colour:</b>	According to product specification
<b>Odour:</b>	Characteristic
<b>Odour threshold:</b>	Not determined.

· **pH-value:** Not determined.

(Contd. on page 6)

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 12.07.2021

Version number 2

Revision: 10.12.2018

**Trade name:** FEYCOPUR 644 Härter langsam

(Contd. of page 5)

· <b>Change in condition</b>	
<b>Melting point/freezing point:</b>	Undetermined.
<b>Initial boiling point and boiling range:</b>	124-128 °C
· <b>Flash point:</b>	30 °C (DIN 53213)
· <b>Flammability (solid, gas):</b>	Not applicable.
· <b>Ignition temperature:</b>	280 °C (DIN 51794)
· <b>Decomposition temperature:</b>	Not determined.
· <b>Auto-ignition temperature:</b>	Product is not selfigniting.
· <b>Explosive properties:</b>	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· <b>Explosion limits:</b>	
<b>Lower:</b>	1.5 Vol %
<b>Upper:</b>	10.8 Vol %
· <b>Vapour pressure at 20 °C:</b>	10.7 hPa
· <b>Density at 20 °C:</b>	1.05 g/cm <sup>3</sup> (DIN 53217)
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with water:</b>	Not miscible or difficult to mix.
· <b>Partition coefficient: n-octanol/water:</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic at 20 °C:</b>	18 s (DIN 53211/4)
· <b>Solvent content:</b>	
<b>VOC (EC)</b>	45.90 %
<b>Solids content (weight-%):</b>	54.1 %
· <b>9.2 Other information</b>	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 according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**
  - Possible in traces.
  - Nitrogen oxides
  - Hydrogen chloride (HCl)
  - Hydrogen cyanide (prussic acid)

(Contd. on page 7)

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 12.07.2021

Version number 2

Revision: 10.12.2018

**Trade name:** FEYCOPUR 644 Härter langsam

(Contd. of page 6)

Carbon monoxide  
Nitrogen oxides (NOx)

### SECTION 11: Toxicological information

#### · 11.1 Information on toxicological effects

##### · Acute toxicity

Harmful if inhaled.

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

##### 112-07-2 2-Butoxyethyl acetate

Oral	LD50	1,880 mg/kg (rat)
Dermal	LD50	1,480 mg/kg (rabbit)

#### · Primary irritant effect:

· **Skin corrosion/irritation** Based on available data, the classification criteria are not met.

· **Serious eye damage/irritation** Based on available data, the classification criteria are not met.

#### · Respiratory or skin sensitisation

May cause an allergic skin reaction.

#### · Additional toxicological information:

##### · 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 respiratory irritation. May cause drowsiness or dizziness.

· **STOT-repeated exposure** Based on available data, the classification criteria are not met.

· **Aspiration hazard** Based on available data, the classification criteria are not met.

### SECTION 12: Ecological information

#### · 12.1 Toxicity

· **Aquatic 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.

#### · Additional ecological information:

##### · General notes:

Water hazard class 1 (German Regulation) : slightly hazardous for water

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

#### · 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.

(Contd. on page 8)

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 12.07.2021

Version number 2

Revision: 10.12.2018

**Trade name:** FEYCOPUR 644 Härter langsam

(Contd. of page 7)

· **European waste catalogue**

08 01 11\* waste paint and varnish containing organic solvents or other hazardous substances

· **Uncleaned packaging:**

· **Recommendation:** Disposal must be made according to official regulations.

### SECTION 14: Transport information

· **14.1 UN-Number**

· **ADR, IMDG, IATA**

UN1263

· **14.2 UN proper shipping name**

· **ADR**

UN1263 PAINT RELATED MATERIAL

· **IMDG, IATA**

PAINT RELATED MATERIAL

· **14.3 Transport hazard class(es)**

· **ADR**



· **Class**

3 (F1) Flammable liquids.

· **Label**

3

· **IMDG, IATA**



· **Class**

3 Flammable liquids.

· **Label**

3

· **14.4 Packing group**

· **ADR, IMDG, IATA**

III

· **14.5 Environmental hazards:**

· **Marine pollutant:**

No

· **14.6 Special precautions for user**

Warning: Flammable liquids.

· **Hazard identification number (Kemler code):**

30

· **EMS Number:**

F-E,S-E

· **Stowage Category**

A

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

Not applicable.

· **Transport/Additional information:**

· **ADR**

· **Limited quantities (LQ)**

5L

· **Transport category**

3

· **Tunnel restriction code**

D/E

(Contd. on page 9)



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

Printing date 12.07.2021

Version number 2

Revision: 10.12.2018

**Trade name:** FEYCOPUR 644 Härter langsam

(Contd. of page 8)

· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	5L
· <b>UN "Model Regulation":</b>	UN 1263 PAINT RELATED MATERIAL, 3, III

**SECTION 15: Regulatory information**

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

- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category P5c** FLAMMABLE LIQUIDS
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 5,000 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 50,000 t
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

· **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients is listed.

- **National regulations:**
- **Additional classification according to Decree on Hazardous Materials, Annex II:**

Class	Share in %
NK	25-50

- **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**

- H226 Flammable liquid and vapour.
- H302 Harmful if swallowed.
- H312 Harmful in contact with skin.
- H317 May cause an allergic skin reaction.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.

· **Classification according to Regulation (EC) No 1272/2008**

The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

· **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

(Contd. on page 10)

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

Printing date 12.07.2021

Version number 2

Revision: 10.12.2018

**Trade name:** FEYCOPUR 644 Härter langsam

(Contd. of page 9)

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. 3: Flammable liquids – Category 3

Acute Tox. 4: Acute toxicity – Category 4

Skin Sens. 1: Skin sensitisation – Category 1

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

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