1-6470-099 **RELAFLOOR Härter 6470** Article No.: Print date: 21.11.2018 Revision date: 24.10.2018 999998 EN Issue date: 11.10.2018 Version: 13 Page 1/8 SECTION 1: Identification of the substance/mixture and of the company/undertaking product identifiers 1.1. Article No. (manufacturer/supplier) 1-6470-099 Identification of the substance or mixture **RELAFLOOR Härter 6470** 1.2. Relevant identified uses of the substance or mixture and uses advised against **Relevant identified uses:** Hardener for 2 component polyurethane resins or coatings 1.3. Details of the supplier of the safety data sheet manufacturer **FEYCOLOR GmbH** Maxhuettenstraße 6 Telephone: 0049 (0)941/60 49 7-0 93055 Regensburg Telefax: 0049 (0)941/60 49 7-30 E-mail info@feycolor.com Website: www.feycolor.com Dept. responsible for information: Department for dangerous goods 0049 (0)941/60 49 7-0 E-mail (competent person) sd@feycolor.com 1.4. Emergency telephone number Emergency telephone number +49 (0) 700 24 11 21 12 (FCM) Österreichische Vergiftungsinformationszentrale +43 (0) 1406 43 43

#### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 [CLP]

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

Flam. Liq. 3 / H226	Flammable liquids	F
Acute Tox. 4 / H332	Acute toxicity (inhalative)	Н
Skin Sens. 1 / H317	Respiratory or skin sensitisation	Μ
STOT SE 3 / H335	Specific target organ toxicity (single	Μ
	exposure)	

#### Flammable liquid and vapour. Harmful if inhaled. May cause an allergic skin reaction. May cause respiratory irritation.

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#### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP] Hazard pictograms

(\*)

#### Warning

#### Hazard statements

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

#### **Precautionary statements**

Frecautionaly states	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P241	Use explosion-proof electrical equipment.
P280	Wear protective gloves and eye/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.
P308 + P313	IF exposed or concerned: Get medical advice/attention.
P405	Keep locked up.
P501	Dispose of contents/container to industrial incineration plant.
Hazard components	for labelling
	1,6-Hexamethylene diisocyanate homopolymer
	hexamethylene-di-isocvanate

#### Supplemental Hazard information (EU)

EUH204 Contains isocyanates. May produce an allergic reaction.



Article No.:	1-6470-099	RELAFLOOR Härter 6470	and the second
Print date:	21.11.2018	Revision date: 24.10.2018	999998 EN
Version:	1.3	Issue date: 11.10.2018	Page 2 / 8

#### 2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

#### **SECTION 3: Composition / information on ingredients**

#### 3.2. Mixtures

Product description / chemical characterization

#### Description

#### Hazardous ingredients

Classification according to Regulation (EC) No 1272/2008 [CLP]

EC No. CAS No. INDEX No.	REACH No. Chemical name classification // Remark	Wt %
500-060-2 28182-81-2	01-2119485796-17 1,6-Hexamethylene diisocyanate homopolymer Acute Tox. 4 H332 / Skin Sens. 1 H317 / STOT SE 3 H335	50 < 100
204-658-1 123-86-4 607-025-00-1	01-2119485493-29 n-butyl acetate Flam. Liq. 3 H226 / STOT SE 3 H336	10 < 12,5
212-485-8 822-06-0 615-011-00-1	01-2119457571-37 hexamethylene-di-isocyanate Acute Tox. 4 H302 / Acute Tox. 2 H330 / Skin Irrit. 2 H315 / Eye Irrit. 2 H319 / Resp. Sens. 1 H334 / Skin Sens. 1 H317 / STOT SE 3 H335	0,1 < 0,3

#### Additional information

Full text of classification: see section 16

## SECTION 4: First aid measures

#### 4.1. Description of first aid measures

#### **General information**

In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

#### In case of inhalation

Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.

#### Following skin contact

Take off immediately all contaminated clothing. After contact with skin, wash immediately with plenty of water and soap. Do not use solvents or thinners.

#### After eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

#### After ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Seek medical advice immediately. Keep victim calm. Do NOT induce vomiting.

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

In all cases of doubt, or when symptoms persist, seek medical advice.

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

No special measures are necessary.

# **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

#### Suitable extinguishing media:

alcohol resistant foam, carbon dioxide, Powder, spray mist, (water)

Extinguishing media which must not be used for safety reasons: strong water jet

#### 5.2. Special hazards arising from the substance or mixture



Article No.:	1-6470-099	RELAFLOOR Härter 6470		
Print date:	21.11.2018	Revision date: 24.10.2018	999998 EN	
Version:	1.3	Issue date: 11.10.2018	Page 3 / 8	

Dense black smoke occurs during fire. Inhaling hazardous decomposing products can cause serious health damage.

#### 5.3. Advice for firefighters

Provide a conveniently located respiratory protective device. Cool closed containers that are near the source of the fire. Do not allow water used to extinguish fire to enter drains, ground or waterways.

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

Keep away from sources of ignition. Ventilate affected area. Do not breathe vapours.

#### 6.2. Environmental precautions

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

#### 6.3. Methods and material for containment and cleaning up

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13). Clean using cleansing agents. Do not use solvents.

#### 6.4. Reference to other sections

Observe protective provisions (see section 7 and 8).

#### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

#### Advices on safe handling

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. Electrical equipment must be protected meeting the accepted standard. Product may become electrostatically charged. Provide earthing of containers, equipment, pumps and ventilation facilities. Anti-static clothing including shoes are recommended. Floors must be electrically conductive. Keep away from heat sources, sparks and open flames. Use only spark proof tools. Avoid contact with skin, eyes and clothes. Do not inhale dusts, particulates and spray mist when using this preparation. Avoid respiration of swarf. When using do not eat, drink or smoke. Personal protection equipment: refer to section 8. Do not empty containers with pressure - no pressure vessel! Always keep in containers that correspond to the material of the original container. Follow the legal protection and safety regulations.

#### Precautions against fire and explosion:

Vapours are heavier than air. Vapours form explosive mixtures with air.

#### 7.2. Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSiVO). Keep container tightly closed. Do not empty containers with pressure - no pressure vessel! Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks. Soils have to conform to the "Guidelines for avoidance of ignition hazards due to electrostatic charges (TRBS 2153)".

#### Hints on joint storage

Keep away from strongly acidic and alkaline materials as well as oxidizers.

#### Further information on storage conditions

Take care of instructions on label. Store in a well-ventilated and dry room at temperatures between 15 °C and 30 °C. Protect from heat and direct sunlight. Keep container tightly closed. Remove all sources of ignition. Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

#### 7.3. Specific end use(s)

Observe technical data sheet.

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

#### 8.1. Control parameters

#### Occupational exposure limit values:

n-butyl acetate INDEX No. 607-025-00-1 / EC No. 204-658-1 / CAS No. 123-86-4 MEL/OES, TWA: 724 mg/m3; 150 ppm MEL/OES, STEL: 966 mg/m3; 200 ppm

#### Additional information



Article No.:	1-6470-099	RELAFLOOR Härter 6470
Print date:	21.11.2018	Revision date: 24.10.2018
Version:	1.3	Issue date: 11.10.2018

999998 EN Page 4 / 8

TWA : long-term occupational exposure limit value STEL : short-term occupational exposure limit value Ceiling : peak limitation

#### 8.2. Exposure controls

Provide good ventilation. This can be achieved with local or room suction. If this should not be sufficient to keep aerosol and solvent vapour concentration below the exposure limit values, a suitable respiratory protection must be used.

#### Occupational exposure controls

#### **Respiratory protection**

If concentration of solvents is beyond the occupational exposure limit values, approved and suitable respiratory protection must be used. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190). Use only respiratory protection equipment with CE-symbol including four digit test number.

#### Hand protection

For prolonged or repeated handling the following glove material must be used: NBR (Nitrile rubber)

Thickness of the glove material 0,7 mm; Breakthrough time (maximum wearing time) 60 min.

Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin. Recommended glove articles DIN EN 374

Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

#### Eye protection

Wear closely fitting protective glasses in case of splashes.

#### **Protective clothing**

Wear antistatic clothing of natural fibers (cotton) or heat resistant synthetic fibers.

#### **Protective measures**

After contact clean skin thoroughly with water and soap or use appropriate cleanser.

#### **Environmental exposure controls**

Do not allow to enter into surface water or drains. See chapter 7. No additional measures necessary.

## **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Appearance:	
Physical state:	Liquid
Colour:	refer to label
Odour:	characteristic
Odour threshold:	not applicable
pH at20 °C:	n.a.
Melting point/freezing point:	not applicable
Initial boiling point and boiling range:	124 °C
	Source: n-butyl acetate
Flash point:	27 °C
Evaporation rate:	not applicable
Flammability (solid, gas):	
Burning time (s):	not applicable
Upper/lower flammability or explosive limits:	
Lower explosion limit:	3 Vol-%
Upper explosion limit:	10,4 Vol-%
	Source: n-butyl acetate
Vapour pressure at20 °C:	1,16 mbar
Vapour density:	not applicable
Relative density:	
Density at20 °C:	1,13 g/cm³
Solubility(ies):	
Water solubility (g/L) at20 °C:	insoluble
Partition coefficient: n-octanol/water:	see section 12



Article Print d Versio	date:	1-6470-099 21.11.2018 1.3	RELAFLOOR Ha Revision date: 2 Issue date: 11.1	4.10.2018	999998 EN Page 5 / 8
		-			
	Auto-igniti	on temperature:		390 °C Source: n-butyl	apotato
	Docompos	ition tomporature:		-	
	-	sition temperature:		not applicable	
	Viscosity a	1120 °C:		> 650 mPa·s	
	Explosive	properties:		not applicable	
	Oxidising	properties:		not applicable	
9.2.	Other info	rmation			
	Solid cont	ent (%):		90 Wt %	
	solvent co	ntent:			
	Organic s	solvents:		10,00 Wt %	
	Water:			0,00 Wt %	
		paration test (%):		< 3 Wt % (ADR/	RID)
SEC	TION 10: S	tability and react	ivity		
10.1.	Reactivity No informa	tion available.			
10.2.	Chemical s	•			
	Stable whe section 7.	n applying the recor	nmended regulati	ons for storage a	and handling. Further information on correct storage: refer to
10.3.	<b>Possibility of hazardous reactions</b> Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.				
10.4.	<b>Conditions to avoid</b> Hazardous decomposition byproducts may form with exposure to high temperatures.				
10.5.	-	ble materials tion available.			
10.6.	Hazardous	decomposition pr decomposition bypr ogen oxides.		with exposure to	high temperatures, e.g.: carbon dioxide, carbon monoxide,
SEC	TION 11: T	oxicological info	rmation		
		on according to Reg preparation itself av		272/2008 [CLP]	
11.1.		n on toxicological			
		city, calculated:			
		lculated, inhalative (	vanours): 12 mg/l		
	Acute toxi	-			
		tate ), Rat: 14000 mg/kg (vapours), LC50, Ra	at:>21 mg/l (4 t	h)	
	1,6-Hexam	ethylene diisocyanat (vapours), LC50, Ra	te homopolymer	,	
	Harmful if	inhaled			
	Harmful if skin corro			eve irritation	
	skin corro	sion/irritation; Seri	ous eye damage/	-	
	skin corro Based on a	sion/irritation; Series available data, the cla	ous eye damage/ assification criteria	-	
	skin corro Based on a Respirator	sion/irritation; Seri	ous eye damage/ assification criteria tion	-	
	skin corro Based on a Respirator 1,6-Hexam Skin:	sion/irritation; Serie available data, the cla ary or skin sensitisat	ous eye damage/ assification criteria tion te homopolymer	-	
	skin corro Based on a Respirator 1,6-Hexam Skin: May caus	sion/irritation; Serie available data, the cla available state the series of the serie	ous eye damage/ assification criteria tion te homopolymer action.	a are not met.	production)
	skin corro Based on a Respirator 1,6-Hexam Skin: May caus CMR effec	sion/irritation; Seria available data, the cla by or skin sensitisat ethylene diisocyanat e an allergic skin rea	ous eye damage/ assification criteria tion te homopolymer action. , mutagenicity an	a are not met. Ind toxicity for re	production)

1-6470-099	RELAFLOOR Härter 6470
21.11.2018	Revision date: 24.10.2018
1.3	Issue date: 11.10.2018
	21.11.2018

999998 EN Page 6 / 8 **FEYCOLOR**<sup>®</sup>

#### n-butyl acetate

Specific target organ toxicity (single exposure), drowsiness: May cause drowsiness or dizziness.

1,6-Hexamethylene diisocyanate homopolymer Specific target organ toxicity (single exposure), Irritation: May cause respiratory irritation.

#### Practical experience/human evidence

#### Other observations:

Inhaling of solvent components above the MWC-value 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. Indications for this are: headache, dizziness, fatigue, amyosthenia, drowsiness, in serious cases: unconsciousness. Solvents may cause some of the aforementioned effects through skin resorption. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and/or absorption through skin. Splashing may cause eye irritation and reversible damage.

#### **Overall Assessment on CMR properties**

The ingredients in this mixture do not meet the criteria for classification as CMR category 1A or 1B according to CLP.

#### Remark

There is no information available on the preparation itself .

#### **SECTION 12: Ecological information**

#### overall evaluation

Classification according to Regulation (EC) No 1272/2008 [CLP] There is no information available on the preparation itself . Do not allow to enter into surface water or drains.

#### 12.1. Toxicity

Toxicological data are not available.

#### Long-term Ecotoxicity

Toxicological data are not available.

- 12.2. **Persistence and degradability** No information available.
- 12.3. Bioaccumulative potential

No information available.

#### Bioconcentration factor (BCF)

No information available.

#### 12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

#### 12.6. Other adverse effects

No information available.

#### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

#### Appropriate disposal / Product

#### Recommendation

Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

#### List of proposed waste codes/waste designations in accordance with EWC

080111 Waste paint and varnish containing organic solvents or other dangerous substances

#### packaging

#### Recommendation

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

Article Print d Versio	late:	1-6470-099 21.11.2018 1.3	RELAFLOOR Härter 6470 Revision date: 24.10.2018 Issue date: 11.10.2018	999998 EN Page 7 / 8		
14.1.	UN num	ber				
			UN 1263			
14.2.	Land tran Sea trans	<b>er shipping name</b> nsport (ADR/RID): sport (IMDG): port (ICAO-TI / IATA	Paint PAINT -DGR): Paint			
14.3.	Land trar	rt hazard class(es) nsport (ADR/RID):	"No good accordin containers > 450 l			
	for packa	sport (IMDG) ages < 30 litres: port (ICAO-TI / IATA		dance with 2.3.2.5 of the IMDG Code		
14.4.	Packing	group	111			
14.5.	Environ	mental hazards				
		nsport (ADR/RID)	not applicable			
	Marine p		not applicable			
14.6		precautions for us				
	Transpor case of a		upright and safe containers. Make sure <sup>.</sup> ge.	that persons transporting the product know what to do in		
	Further i	information				
	I and tra	nsport (ADR/RID)				
		striction code	D/E			
	Sea tran	sport (IMDG)				
	EmS-No.		F-E, S-E			
	Air trans	port (ICAO-TI / IAT	A-DGR)			
14.7.	<ul> <li>Transport in bulk according to Annex II of Marpol and the IBC Code not applicable</li> </ul>					
0EC.		Regulatory infor	rmotion			
10.1.	-		nental regulations/legislation specified	c for the substance of mixture		
	EU legislation Directive 2010/75/EU on industrial emissions					
	VOC-val	ue (in g/L): 113				
		National regulations				
	Observe		tions under the Maternity Protection Dire	ective (92/85/EEC) for expectant or nursing mothers. enile work protection guideline' (94/33/EC).		
	Other re	gulations, restriction	ons and prohibition regulations			
15.2.		al Safety Assessme following substanc		ety assessment has been carried out:		
	EC No. CAS No.		ical name	REACH No.		
	500-060- 28182-8	-2 1,6-He	examethylene diisocyanate homopolym	er 01-2119485796-17		
	204-658- 123-86-4	1 n-buty	/l acetate	01-2119485493-29		
	212-485-		nethylene-di-isocyanate	01-2119457571-37		

# **SECTION 16: Other information**

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Article No.: Print date: Version:	1-6470-099 21.11.2018 1.3	RELAFLOOR Härter 6470 Revision date: 24.10.2018 Issue date: 11.10.2018	999998 EN Page 8 / 8
Full text	of classification i	n section 3:	
Acute To	ox. 4 / H332	Acute toxicity (inhalative)	Harmful if inhaled.
Skin Ser	ns. 1 / H317	Respiratory or skin sensitisation	May cause an allergic skin reaction.
STOT SE	E 3 / H335	Specific target organ toxicity (single exposure)	May cause respiratory irritation.
Flam. Lic	q. 3 / H226	Flammable liquids	Flammable liquid and vapour.
STOT SE	E 3 / H336	Specific target organ toxicity (single exposure)	May cause drowsiness or dizziness.
Acute To	ox. 4 / H302	Acute toxicity (oral)	Harmful if swallowed.
Acute To	ox. 2 / H330	Acute toxicity (inhalative)	Fatal if inhaled.
Skin Irrit	. 2 / H315	skin corrosion/irritation	Causes skin irritation.
Eye Irrit.	2 / H319	Serious eye damage/eye irritation	Causes serious eye irritation.
Resp. Se	ens. 1 / H334	Respiratory or skin sensitisation	May cause allergy or asthma symptoms or breathing difficulties if inhaled.

#### Abbreviations and acronyms

ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European
	Agreement concerning the International Carriage of Dangerous Goods by Road)
AGW (WEL)	Occupational Exposure Limit Value
CAS	Chemicals Abstract Service
CLP	Classification, Labelling and Packaging
CMR	Carcinogenic, Mutagenic and Reprotoxic
DNEL	Derived No-Effect Level
IATA-DGR	International Air Transport Association – Dangerous Goods Regulations
ICAO-TI	International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous
	Goods by Air
IMDG Code	International Maritime Code for Dangerous Goods
PBT	persistent, bioaccumulative, toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport international ferroviaire de marchandises Dangereuses
	(Regulations concerning the International Carriage of Dangerous Goods by Rail)
UN	United Nations
LC	Lethal Concentration
LD	Lethal Dose
VOC	Volatile Organic Compounds
vPvB	very persistent and very bioaccumulative
	Very persistent and very biodecumulative

#### Further information

Classification according to Regulation (EC) No 1272/2008 [CLP]

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations. Without written approval, the product must not be used for purposes different from those mentioned in chapter 1. It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations. The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.