

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

**Article No. (manufacturer/supplier):** 115-509  
**Identification of the substance or mixture:** FEYCOTECT 509 Hardener EP9

**Use of the substance/ preparation:**  
Hardener for 2 component epoxy resins or coatings

#### 1.3. Details to the supplier providing the material safety data sheet

##### Producer:

**FEYCOLOR GmbH**  
Maxhuettenstraße 6,  
93055 Regensburg,  
Germany

Tel.: +49 (0) 941/ 60497-0  
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info@feycolor.com                      www.feycolor.com

Office hours:  
Monday - Thursday: 08:00 - 12:00 and 13:00 - 16:00  
Friday: 08:00 - 12:00

##### Department responsible for information:

Hazardous material management: sd@feycolor.com

### 2. Hazards identification

#### Hazards description



F Highly flammable



Xn Harmful

#### Information pertaining to special dangers for human and environment

11 Highly flammable  
20/21 Harmful by inhalation and in contact with skin.  
37/38 Irritating to respiratory system and skin.  
41 Risk of serious damage to eyes.  
43 May cause sensitization by skin contact.  
52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### 3. Composition / Information on ingredients

#### Product description / chemical characterization

**Description** Preparation out of epoxy resin, pigment, extenders and solvent

#### Hazardous ingredients

EC No. CAS No. INDEX No.	Chemical name R-phrases REACH No.	Hazard symbol(s): Remark	Wt %
215-535-7 1330-20-7 601-022-00-9	xylene, mixture of isomers 10-20/21-38 02-2119752448-30	Xn	25 - 50
201-148-0 78-83-1 603-108-00-1	2-methylpropan-1-ol 10-37/38-41-67 01-2119484609-23	Xi	12,5 - 20
200-751-6 71-36-3 603-004-00-6	butan-1-ol 10-22-37/38-41-67 01-2119484630-38	Xn	10 - 12,5
203-550-1 108-10-1	4-methylpentan-2-one 11-20-36/37-66	Xn,F	5 - 10

606-004-00-4	01-2119473980-30		
202-849-4	ethylbenzene	Xn,F	2,5 - 5
100-41-4	11-20		
601-023-00-4			
500-033-5	reaction product: bisphenol A-(epichlorhydrin); epoxy resin (number	Xi,N	2,5 - 5
25068-38-6	average molecular weight <= 700)		
603-074-00-8	36/38-43-51/53		
	01-2119456619-26		

**Additional information**

\* Substance with a common (EC) occupational exposure limit value. Full text of R-phrases: see section 16.

**4. 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.

**After 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**

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

**After eye contact**

IF IN EYES: 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.

**5. Firefighting measures**

**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

**Special exposure hazards arising from the substance or preparation itself, its combustion products or from resulting gases:**

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

**Special protective equipment for firefighters:**

Provide a conveniently located respiratory protective device.

**Additional information**

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. Treat runoff as hazardous.

**6. Accidental release measures**

**Personal precautions**

Keep away from sources of ignition. Ventilate affected area. Do not breathe vapours. See protective measures under point 7 and 8.

**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.

**Methods for 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 chapter 13). Clean using cleansing agents. Do not use solvents.

**7. Handling and storage**

**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 chapter 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.

**Storage**

**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 (BGR 132)".

**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.

**8. Exposure controls / Personal protection**

**Technical measures to prevent exposure**

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.

**Components with occupational exposure limits resp. biological occupational exposure limits requiring monitoring**

EC No. CAS No.	Description	type	Limit value		Unit
			STEL (EC)	TWA (EC)	
215-535-7 1330-20-7	xylene, mixture of isomers		441	220	mg/m3
			100	50	ppm
202-849-4 100-41-4	ethylbenzene		552	441	mg/m3
			125	100	ppm
200-751-6 71-36-3	butan-1-ol		154		
			50		
203-550-1 108-10-1	4-methylpentan-2-one		416	208	mg/m3
			100	50	ppm
201-148-0 78-83-1	2-methylpropan-1-ol		231	154	mg/m3
			75	50	ppm

**Additional information**

Stated values are taken from the then applicable German TRGS 900 or the German VCI table for exposure limit values.

TWA (EC): occupational exposure limit value

STEL (EC): short-term occupational exposure limit value

**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.

**Dand protection**

For prolonged or repeated handling the following glove material must be used: solventresistant Latex gloves / solventresistant Latex gloves

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.

## 9. Physical and chemical properties

### Appearance:

**Physical state** liquid, see viscosity!

**Colour** see productname

**Odour** typical

Safety relevant basis data	Measured values	Unit	Method	Remark
<b>Flash point:</b>	12	°C		
<b>Ignition temperature in °C:</b>	340	°C		
<b>lower explosion limit</b>	1,2	Vol-%		
<b>Upper explosion limit</b>	12,0	Vol-%		
<b>Vapour pressure at 20 °C:</b>	5,70	hPa		
<b>Density at 20 °C:</b>	0,92	g/cm <sup>3</sup>		
<b>Water solubility (g/L)</b>	insoluble			
<b>pH value at 20 °C:</b>	n.a.			
<b>Viscosity at 20 °C:</b>	> 3500	mPa·s		
<b>Solvent separation test (%)</b>	< 3	%		
<b>Solid content (%):</b>	35	Wt %		
<b>solvent content:</b>				
<b>Organic solvents::</b>	65,45	Wt %		
<b>Water:</b>	0,00	Wt %		

## 10. Stability and reactivity

### Conditions to avoid

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to chapter 7. Hazardous decomposition byproducts may form with exposure to high temperatures.

### Materials to avoid

Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

### Hazardous decomposition products

Hazardous decomposition byproducts may form with exposure to high temperatures, e.g.: carbon dioxide, carbon monoxide, smoke, nitrogen oxides.

## 11. Toxicological information

No data on preparation itself available.

### 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, dizziness, 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 preparation do not meet the criteria for classification as CMR category 1 or 2. according to 67/548/EEC.

There is no information available on the preparation itself. The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified according to the toxicological dangers. See chapters 2 and 15 for details.

## 12. Ecological information

**overall evaluation**

There is no information available on the preparation itself .  
Do not allow to enter into surface water or drains.

**Results of PBT assessment**

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

**13. Disposal considerations**

**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 EC directives 75/442/EEC and 91/689/EEC in the corresponding versions, 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.

**14. Transport information**

Transport according to ADR/RID, IMDG and ICAO/IATA.

**Land transport (ADR/RID)**

Class(es)	3
Hazard label(s)	3
UN number	1263
Hazard identification number (Kemler No.)	33
Proper Shipping Name	Paint SONDERVORSCHRIFT 640H
Packing group	III
tunnel restriction code	D/E

**Sea transport (IMDG)**

Class(es)	3
Hazard label(s)	3
EmS-No.	F-E, S-E
UN number	1263
Proper Shipping Name	PAINT
Packing group	III

**for packages > 30 litres:**

Packing group	II
Marine pollutant	n.a.

**Air transport (ICAO-TI / IATA-DGR)**

Class(es)	3
Hazard label(s)	3
UN number	1263
Proper Shipping Name	Paint
Packing group	III
for packages > 30 litres:	
Packing group	II

**15. Regulatory information**

**EU legislation**

**Chemical Safety Assessment**

Chemical safety assessments for substances in this preparation were not carried out.

**Labelling (67/548/EEC or 1999/45/EC)**

### Hazard symbols and hazard statements of dangerous substances and preparations



F Highly flammable



Xn Harmful

### Contains:

xylene, mixture of isomers  
reaction product: bisphenol A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)

### R-phrases

11 Highly flammable  
20/21 Harmful by inhalation and in contact with skin.  
37/38 Irritating to respiratory system and skin.  
41 Risk of serious damage to eyes.  
43 May cause sensitization by skin contact.  
52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### S-phrases

16 Keep away from sources of ignition. - No smoking.  
24 Avoid contact with skin.  
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.  
38 In case of insufficient ventilation, wear suitable respiratory equipment.  
51 Use only in well-ventilated areas.  
61 Avoid release to the environment. Refer to special instructions/safety data sheet.  
23 Do not breathe vapour.

### Special provisions concerning the labelling of certain mixtures

92 Contains epoxy constituents. May produce an allergic reaction.

### Other regulations (EU)

### VOC-Richtlinie: Information according to 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline).

VOC-value (in g/L) ISO 11890-2: 605  
65,45  
VOC-value (in g/L) ASTM D 2369: 531

### DECOPAINT: according to EU-regulation 2004/42/EC (appendix II)

EU limit value for this product (cat. nicht anwendbar): 0 g/l (2007)/0 g/l (2010).  
This product contains max 605 g/l VOC.

### National regulations

#### Restrictions of occupation

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.  
Observe restrictions to employment for juvenils according to the "juvenile work protection guideline" (94/33/EC).

#### Other regulations, restrictions and prohibition regulations

## 16. Other information

### Wording of the R-phrases under paragraph 3:

36/38 Irritating to eyes and skin.  
43 May cause sensitization by skin contact.  
51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
10 Flammable  
20/21 Harmful by inhalation and in contact with skin.  
38 Irritating to skin.  
11 Highly flammable  
20 Harmful by inhalation.  
22 Harmful if swallowed.  
37/38 Irritating to respiratory system and skin.  
41 Risk of serious damage to eyes.

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- 67 Vapours may cause drowsiness and dizziness.  
36/37 Irritating to eyes and respiratory system.  
66 Repeated exposure may cause skin dryness or cracking.

**Additional information**

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.