


**SECTION 1: Identification of the substance/mixture and of the company/undertaking**
**1.1 Product identifier**

**Pigment Black**

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

Mounting material for metallographic specimens

**1.2.2 Uses advised against**

None known.

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

**Company** ITW Test & Measurement GmbH  
 In der Steele 2  
 40599 Düsseldorf / GERMANY  
 Phone 0800 707 6273  
 Fax 0800 707 6274  
 Homepage [www.buehler-met.de](http://www.buehler-met.de)  
 E-mail [info.uk@buehler.com](mailto:info.uk@buehler.com)

**Address enquiries to**

**Technical information** [info.uk@buehler.com](mailto:info.uk@buehler.com)  
**Safety Data Sheet** [sdb@chemiebuero.de](mailto:sdb@chemiebuero.de)

**1.4 Emergency telephone number**

**Company** 0800 707 6273 (Only valid if dialled within the UK) +49 (0) 211 974100

**SECTION 2: Hazards identification**
**2.1 Classification of the substance or mixture**

Skin Irrit. 2: H315 Causes skin irritation.  
 Eye Irrit. 2: H319 Causes serious eye irritation.  
 Skin Sens. 1: H317 May cause an allergic skin reaction.  
 Aquatic Chronic 2: H411 Toxic to aquatic life with long lasting effects.

**2.2 Label elements**

The product is classified and required to be labelled in accordance with EC-Directives

**Hazard pictograms**

**Signal word**

WARNING

**Contains:**

Reaction product: bisphenol-A-(epichlorhydrin) Epoxy resin (number average molecular weight ≤ 700)

Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

**Hazard statements**

H315 Causes skin irritation.  
 H319 Causes serious eye irritation.  
 H317 May cause an allergic skin reaction.  
 H411 Toxic to aquatic life with long lasting effects.

**Precautionary statements**

P280 Wear protective gloves / eye protection / face protection.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P337+P313 If eye irritation persists: Get medical advice / attention.  
 P302+P352 IF ON SKIN: Wash with plenty of water / soap.  
 P273 Avoid release to the environment.  
 P501 Dispose of contents / container to in accordance with local / regional / national / international regulation.

**2.3 Other hazards**
**Environmental hazards**

Does not contain any PBT or vPvB substances.

**Other hazards**

Further hazards were not determined with the current level of knowledge.



### SECTION 3: Composition / Information on ingredients

#### Product-type:

The product is a mixture.

Range [%]	Substance
50 - 80	Reaction product: bisphenol-A-(epichlorhydrin) Epoxy resin (number average molecular weight $\leq$ 700) CAS: 25068-38-6, EINECS/ELINCS: 500-033-5, EU-INDEX: 603-074-00-8 GHS/CLP: Eye Irrit. 2: H319 - Skin Irrit. 2: H315 - Skin Sens. 1: H317 - Aquatic Chronic 2: H411
10 - 30	Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. CAS: 68609-97-2, EINECS/ELINCS: 271-846-8, EU-INDEX: 603-103-00-4 GHS/CLP: Skin Irrit. 2: H315 - Skin Sens. 1: H317

#### Comment on component parts

Substances of Very High Concern - SVHC: substances are not contained or are below 0,1%.  
For full text of H-statements: see SECTION 16.

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

##### General information

Take off contaminated clothing and wash before reuse.

##### Inhalation

Ensure supply of fresh air.  
In the event of symptoms seek medical treatment.

##### Skin contact

In case of contact with skin wash off immediately with soap and water.  
Consult a doctor if skin irritation persists.

##### Eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice/attention.

##### Ingestion

Consult a doctor immediately.  
Do not induce vomiting.

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

Allergic reactions  
Irritant effects

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

Treat symptomatically.

### SECTION 5: Fire-fighting measures

#### 5.1 Extinguishing media

##### Suitable extinguishing media

Water spray jet.  
Dry powder.  
Carbon dioxide.  
Foam.

##### Extinguishing media that must not be used

Full water jet.

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

Risk of formation of toxic pyrolysis products.

#### 5.3 Advice for firefighters

Use self-contained breathing apparatus.

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.



## SECTION 6: Accidental release measures

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

High risk of slipping due to leakage/spillage of product.  
Use personal protective equipment.

### 6.2 Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers).  
Do not discharge into the drains/surface waters/groundwater.  
In case the product spills into drains/surface waters/groundwater, immediately inform the authorities.

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

Pick up with absorbent material (e.g. sand, universal absorbent, diatomaceous earth).  
Dispose of absorbed material in accordance within the regulations.

### 6.4 Reference to other sections

See SECTION 8+13

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Use only in well-ventilated areas.

Do not eat, drink, smoke or take drugs at work.  
Take off contaminated clothing and wash before reuse.  
After worktime and before work breaks the affected skin areas must be thoroughly cleaned.  
Use barrier skin cream.

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

Keep only in original container.  
Prevent penetration into the ground.  
Do not store together with oxidizing agents.  
Do not store together with food and animal food/diet.  
Keep container tightly closed.  
Keep container in a well-ventilated place.  
Keep in a cool place. Store in a dry place.

### 7.3 Specific end use(s)

See product use, SECTION 1.2

## SECTION 8: Exposure controls / personal protection

### 8.1 Control parameters

#### Ingredients with occupational exposure limits to be monitored (GB)

Range [%]	Substance
10 - 20	Carbon Black
	CAS: 1333-86-4, EINECS/ELINCS: 215-609-9, Reg-No.: 01-2119384822-32-XXXX
	Long-term exposure: 3,5 mg/m <sup>3</sup>
	Short-term exposure (15-minute): 7 mg/m <sup>3</sup>



## 8.2 Exposure controls

<b>Additional advice on system design</b>	Ensure adequate ventilation on workstation.
<b>Eye protection</b>	Safety glasses.
<b>Hand protection</b>	The details concerned are recommendations. Please contact the glove supplier for further information. In splash contact 4mm: Butyl rubber, >120 min (EN 374). In full contact: 7mm: Butyl rubber, >480 min (EN 374).
<b>Skin protection</b>	Light protective clothing of plastic material.
<b>Other</b>	Avoid contact with eyes and skin. Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.
<b>Respiratory protection</b>	Not required under normal conditions.
<b>Thermal hazards</b>	not applicable
<b>Delimitation and monitoring of the environmental exposition</b>	Protect the environment by applying appropriate control measures to prevent or limit emissions.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<b>Form</b>	liquid
<b>Color</b>	black
<b>Odor</b>	characteristic
<b>Odour threshold</b>	No information available.
<b>pH-value</b>	not applicable
<b>pH-value [1%]</b>	not applicable
<b>Boiling point [°C]</b>	No information available.
<b>Flash point [°C]</b>	> 100
<b>Flammability (solid, gas) [°C]</b>	not applicable
<b>Lower explosion limit</b>	not applicable
<b>Upper explosion limit</b>	not applicable
<b>Oxidizing properties</b>	no
<b>Vapour pressure/gas pressure [kPa]</b>	No information available.
<b>Density [g/ml]</b>	1,157 (20 °C / 68,0 °F)
<b>Bulk density [kg/m³]</b>	not applicable
<b>Solubility in water</b>	virtually insoluble
<b>Partition coefficient [n-octanol/water]</b>	No information available.
<b>Viscosity</b>	No information available.
<b>Relative vapour density determined in air</b>	> 1
<b>Evaporation speed</b>	< 1
<b>Melting point [°C]</b>	No information available.
<b>Autoignition temperature [°C]</b>	No information available.
<b>Decomposition temperature [°C]</b>	No information available.

### 9.2 Other information

none

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No dangerous reactions known if used as directed.



### 10.2 Chemical stability

The product is stable under standard conditions.

### 10.3 Possibility of hazardous reactions

Reactions with oxidizing agents.

Reactions with strong acids and alkalies.

### 10.4 Conditions to avoid

Strong heating.

### 10.5 Incompatible materials

See SECTION 10.3.

### 10.6 Hazardous decomposition products

No hazardous decomposition products known.



## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

Range [%]	Substance
10 - 30	Oxirane, mono[(C12-14-alkyloxy)methyl] derivs., CAS: 68609-97-2
	LD50, dermal, Rabbit: ~ 3987 mg/kg (Lit.).
	LD50, oral, Rat: ~ 17100 mg/kg (Lit.).
	LD50, dermal, Rabbit: > 4500 mg/kg.
	LD50, oral, Rat: 19200 mg/kg.
50 - 80	Reaction product: bisphenol-A-(epichlorhydrin) Epoxy resin (number average molecular weight ≤ 700), CAS: 25068-38-6
	LD50, dermal, > 2000 mg/kg.
	LD50, oral, > 2000 mg/kg.

<b>Serious eye damage/irritation</b>	Toxicological data of complete product are not available. Irritant Calculation method
<b>Skin corrosion/irritation</b>	Toxicological data of complete product are not available. Irritant Calculation method
<b>Respiratory or skin sensitisation</b>	Toxicological data of complete product are not available. Sensitizing. Calculation method
<b>Specific target organ toxicity — single exposure</b>	Toxicological data of complete product are not available. Based on the available information, the classification criteria are not fulfilled.
<b>Specific target organ toxicity — repeated exposure</b>	Toxicological data of complete product are not available. Based on the available information, the classification criteria are not fulfilled.
<b>Mutagenicity</b>	Toxicological data of complete product are not available. Based on the available information, the classification criteria are not fulfilled.
<b>Reproduction toxicity</b>	Toxicological data of complete product are not available. Based on the available information, the classification criteria are not fulfilled.
<b>Carcinogenicity</b>	Toxicological data of complete product are not available. Based on the available information, the classification criteria are not fulfilled.
<b>Aspiration hazard</b>	Toxicological data of complete product are not available. Based on the available information, the classification criteria are not fulfilled.
<b>General remarks</b>	Symptoms (If swallowed): abdominal pain, nausea, vomiting. May cause respiratory tract irritation (vapours/fumes).  The product was classified on the basis of the calculation procedure of the preparation directive. The toxicity data listed pertaining to the ingredients are intended for those working in the medicinal professions, experts for occupational health and safety and toxicologists. The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

## SECTION 12: Ecological information

### 12.1 Toxicity

Range [%]	Substance
10 - 30	Oxirane, mono[(C12-14-alkyloxy)methyl] derivs., CAS: 68609-97-2
	EC0, Daphnia magna: 10 mg/l (Lit.).
50 - 80	Reaction product: bisphenol-A-(epichlorhydrin) Epoxy resin (number average molecular weight ≤ 700), CAS: 25068-38-6
	LC50, (96h), Oncorhynchus mykiss: 2 mg/l (Lit.).
	EC50, (48h), Daphnia magna: 1,8 mg/l (Lit.).
	ErC50, (72h), Scenedesmus subspicatus: 11 mg/l (Lit.).



## 12.2 Persistence and degradability

<b>Behaviour in environment compartments</b>	No information available.
<b>Behaviour in sewage plant</b>	Can be separated out mechanically in purification plants.
<b>Biological degradability</b>	CAS 25068-38-6: 12%, 28d, OECD 302B (Lit.)

## 12.3 Bioaccumulative potential

log Pow: 3-5 (CAS 25068-38-6)(Lit.)  
BCF: 100-3000 (CAS 25068-38-6)(Lit.)

## 12.4 Mobility in soil

log Koc: 1.800-4.400 (CAS 25068-38-6)(Lit.)

## 12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

## 12.6 Other adverse effects

The product is insoluble in water.  
The product contains organically bound halogen in accordance with the formulation.  
The product was classified on the basis of the calculation procedure of the preparation directive.  
The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

#### Product

Disposal in an incineration plant in accordance with the regulations of the local authorities.

#### Waste no. (recommended)

080409\*

#### Contaminated packaging

Packaging that cannot be cleaned should be disposed of as for product.  
Uncontaminated packaging may be taken for recycling.

#### Waste no. (recommended)

150102  
150110\*

## SECTION 14: Transport information

### 14.1 UN number

See SECTION 14.2 in accordance with UN shipping name

**14.2 UN proper shipping name**

Transport by land according to ADR/RID

UN 3082 Environmentally hazardous substance, liquid, n.o.s. (Bisphenol A Epoxy resin) 9 III

- Classification Code

M6

- Label



- ADR LQ

5 I

- ADR 1.1.3.6 (8.6)

Transport category (tunnel restriction code) 3 (E)

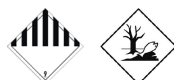
Inland navigation (ADN)

UN 3082 Environmentally hazardous substance, liquid, n.o.s. (Bisphenol A Epoxy resin) 9 III

- Classification Code

M6

- Label



Marine transport in accordance with IMDG

UN 3082 Environmentally hazardous substance, liquid, n.o.s. (Bisphenol A Epoxy resin) 9 III  
MARINE POLLUTANT

- EMS

F-A, S-F

- Label



- IMDG LQ

5 I

Air transport in accordance with IATA UN 3082 Environmentally hazardous substance, liquid, n.o.s. (Bisphenol A Epoxy resin) 9 III

- Label

**14.3 Transport hazard class(es)**

See SECTION 14.2 in accordance with UN shipping name

**14.4 Packing group**

See SECTION 14.2 in accordance with UN shipping name

**14.5 Environmental hazards**

See SECTION 14.2 in accordance with UN shipping name

**14.6 Special precautions for user**

Relevant information under SECTION 6 to 8.

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

not determined

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

EEC-REGULATIONS

1991/689 (2001/118); 1999/13; 2004/42; 648/2004; 1907/2006 (REACH); 1272/2008; 75/324/EEC (2008/47/EC); 453/2010/EC; (EU) 2015/830

TRANSPORT-REGULATIONS

DOT-Classification, ADR (2015); IMDG-Code (2015, 37. Amdt.); IATA-DGR (2015).

NATIONAL REGULATIONS (GB):

EH40/2005 Workplace exposure limits (Second edition, published December 2011).  
CHIP 3/ CHIP 4

- Observe employment restrictions for people

Observe employment restrictions for mothers-to-be and nursing mothers. Observe employment restrictions for young people.

- VOC (1999/13/CE)

0 %





## 15.2 Chemical safety assessment

not applicable

## SECTION 16: Other information

### 16.1 Hazard statements (SECTION 3)

H411 Toxic to aquatic life with long lasting effects.

H317 May cause an allergic skin reaction.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

### 16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route

RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses

ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure

CAS = Chemical Abstracts Service

CLP = Classification, Labelling and Packaging

DMEL = Derived Minimum Effect Level

DNEL = Derived No Effect Level

EC50 = Median effective concentration

ECB = European Chemicals Bureau

EEC = European Economic Community

EINECS = European Inventory of Existing Commercial Chemical Substances

ELINCS = European List of Notified Chemical Substances

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk

IC50 = Inhibition concentration, 50%

IMDG = International Maritime Code for Dangerous Goods

IUCLID = International Uniform Chemical Information Database

LC50 = Lethal concentration, 50%

LD50 = Median lethal dose

MARPOL = International Convention for the Prevention of Marine Pollution from Ships

PBT = Persistent, Bioaccumulative and Toxic substance

PNEC = Predicted No-Effect Concentration

REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals

TLV@TWA = Threshold limit value – time-weighted average

TLV@STEL = Threshold limit value – short-time exposure limit

VOC = Volatile Organic Compounds

vPvB = very Persistent and very Bioaccumulative

### 16.3 Other information

#### Classification procedure

Skin Irrit. 2: H315 Causes skin irritation. (Calculation method)

Eye Irrit. 2: H319 Causes serious eye irritation. (Calculation method)

Skin Sens. 1: H317 May cause an allergic skin reaction. (Calculation method)

Aquatic Chronic 2: H411 Toxic to aquatic life with long lasting effects. (Calculation method)

**Modified position**

SECTION 6 been added: Pick up with absorbent material (e.g. sand, universal absorbent, diatomaceous earth).

SECTION 7 been added: Keep in a cool place. Store in a dry place.

SECTION 8 been added: In splash contact

SECTION 8 been added: In full contact:

SECTION 8 been added: Butyl rubber, >480 min (EN 374).

SECTION 9 been added: No information available.

SECTION 9 deleted: not determined

SECTION 10 been added: See SECTION 10.3.

SECTION 10 been added: Reactions with strong acids and alkalis.

SECTION 10 been added: Strong heating.

SECTION 11 been added: Based on the available information, the classification criteria are not fulfilled.

SECTION 11 been added: Toxicological data of complete product are not available.

SECTION 11 been added: Calculation method

SECTION 11 deleted: not determined

SECTION 11 been added: Toxicological data of complete product are not available.

SECTION 12 deleted: not determined

SECTION 12 been added: The product is insoluble in water.

SECTION 12 been added: Can be separated out mechanically in purification plants.

SECTION 12 been added: No information available.

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