Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2015/830

SECTION 1: Identification of the substance/preparation and of the company/undertakting

1.1. **Product identifier**

Trade name/designation: WEBAC 4170T Comp. A
Epoxy Injection Resin

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

Relevant identified uses
epoxy resin component

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

supplier (manufacturer/importer/downstream user/distributor)
WEBAC-Chemie GmbH
Fahrenberg 22
22885 Barsbüttel / Hamburg
GERMANY
Telephone: +49 40 67057-0
Telefax: +49 40 6703227

Department responsible for information:
laboratory
E-mail: sdb@webac.de

1.4. **Emergency telephone number**

Giftinformationszentrum-Nord: +49 551 19240

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].

Skin Irrit. 2 / H315	Skin corrosion/irritation	Causes skin irritation.
Eye Irrit. 2 / H319	Serious eye damage/eye irritation	Causes serious eye irritation.
Skin Sens. 1 / H317	Respiratory or skin sensitisation	May cause an allergic skin reaction.
Aquatic Chronic 2 / H411	Hazardous to the aquatic environment	Toxic to aquatic life with long lasting effects.

2.2. **Label elements**

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

Hazard pictograms

Warning

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

P273	Avoid release to the environment.
P280	Wear protective gloves and eye/face protection.
P391	Collect spillage.

Hazard components for labelling

reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2)
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane
Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-((2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl)oxirane

Supplemental hazard information

EUH205: Contains epoxy constituents. May produce an allergic reaction.

2.3. **Other hazards**

No information available.

SECTION 3: Composition / information on ingredients

3.2. **Mixtures**

Description epoxy resin component

Hazardous ingredients

EC No. CAS No. Index No.	REACH No. Designation classification: // Remark	weight-%
618-939-5 933999-84-9	01-2119463471-41-xxxx reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2) Skin Irrit. 2 H315 / Eye Irrit. 2 H319 / Skin Sens. 1 H317 / Aquatic Chronic 3 H412	25 - 50
216-823-5 1675-54-3	01-2119456619-26-xxxx 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane Skin Irrit. 2 H315 / Eye Irrit. 2 H319 / Skin Sens. 1 H317 / Aquatic Chronic 2 H411 Specific concentration limit (SCL): Skin Irrit. 2 H315 >= 5 / Eye Irrit. 2 H319 >= 5	25 - 50
701-263-0	01-2119454392-40-xxxx Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-((2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl)oxirane Skin Irrit. 2 H315 / Skin Sens. 1 H317 / Aquatic Chronic 2 H411	10 - 25
254-052-6 38640-62-9	01-2119565150-48-xxxx Bis(isopropyl)naphthalene Asp. Tox. 1 H304 / Aquatic Chronic 1 H410 (M = 1)	2,5 - 10

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.

Following 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 information available.

SECTION 5: Firefighting measures

5.1. **Extinguishing media**

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

Unsuitable extinguishing media
strong water jet

5.2. **Special hazards arising from the substance or mixture**
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.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**
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).

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 contact with skin, eyes and clothes. Do not inhale dusts, particulates and spray mist when using this preparation. When using do not eat, drink or smoke. Personal protection equipment: refer to section 8. Follow the legal protection and safety regulations.

Further information
Vapours are heavier than 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. Always keep in containers that correspond to the material of the original container.

Hints on joint storage
Keep away from food, drink and animal feedingstuffs.

Further information on storage conditions
Take care of instructions on label. Store in a well-ventilated and dry room at temperatures between 5 °C and 30 °C. Protect from heat and direct sunlight.

7.3. **Specific end use(s)**
Observe technical data sheet. Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1. **Control parameters**
Occupational exposure limit values:

not applicable

DNEL:

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane
EC No. 216-823-5 / CAS No. 1675-54-3
DNEL long-term dermal (systemic), Workers: 0,75 mg/kg bw/day
DNEL long-term inhalative (systemic), Workers: 4,93 mg/m³

Bis(isopropyl)naphthalene
EC No. 254-052-6 / CAS No. 38640-62-9
DNEL long-term dermal (systemic), Workers: 4,3 mg/kg bw/day

DNEL long-term inhalative (systemic), Workers: 30 mg/m³

reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2)
EC No. 618-939-5 / CAS No. 933999-84-9
DNEL long-term dermal (systemic), Workers: 2,8 mg/kg bw/day
DNEL acute inhalative (systemic), Workers: 4,9 mg/m³
DNEL long-term inhalative (systemic), Workers: 4,9 mg/m³

Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-((2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl)oxirane
EC No. 701-263-0
DNEL long-term dermal (systemic), Workers: 104,15 mg/kg bw/day
DNEL long-term inhalative (systemic), Workers: 29,39 mg/m³

PNEC:

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane
EC No. 216-823-5 / CAS No. 1675-54-3
PNEC aquatic, freshwater: 0,006 mg/L
PNEC aquatic, marine water: 0,001 mg/L
PNEC sediment, freshwater: 0,341 mg/kg
PNEC sediment, marine water: 0,034 mg/kg
PNEC, soil: 0,065 mg/kg
PNEC sewage treatment plant (STP): 10 mg/L
PNEC Secondary Poisoning: 11 mg/kg

Bis(isopropyl)naphthalene
EC No. 254-052-6 / CAS No. 38640-62-9
PNEC aquatic, freshwater: 0,26 x10^-3 mg/L
PNEC sediment, freshwater: 0,94 mg/kg
PNEC sediment, marine water: 0,094 mg/kg
PNEC, soil: 0,1872 mg/kg
PNEC sewage treatment plant (STP): 0,15 mg/L

reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2)
EC No. 618-939-5 / CAS No. 933999-84-9
PNEC aquatic, freshwater: 0,0115 mg/L
PNEC aquatic, marine water: 0,0115 x10^-1 mg/L
PNEC aquatic, intermittent release: 0,115 mg/L
PNEC sediment, freshwater: 0,283 mg/kg
PNEC sediment, marine water: 0,0283 mg/kg
PNEC, soil: 0,223 mg/kg
PNEC sewage treatment plant (STP): 1 mg/L

Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-((2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl)oxirane
EC No. 701-263-0
PNEC aquatic, freshwater: 0,003 mg/L
PNEC aquatic, marine water: 0,0003 mg/L
PNEC aquatic, intermittent release: 0,025 mg/L
PNEC sediment, freshwater: 0,294 mg/kg
PNEC sediment, marine water: 0,0294 mg/kg
PNEC, soil: 0,237 mg/kg
PNEC sewage treatment plant (STP): 10 mg/L

8.2. **Exposure controls**

Provide good ventilation. This can be achieved with local or room suction. If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means. In case of inadequate ventilation wear respiratory protection.

Personal protection equipment

Respiratory protection
Suitable respiratory protection apparatus:
Usually no personal respirative protection necessary.

Hand protection
For prolonged or repeated handling the following glove material must be used: nitrile rubber or butyl rubber
Thickness of the glove material > 0,4 mm ; Breakthrough time: > 480 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 EN ISO 374
Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

Eye/face protection
Wear eye glasses with side protection according to EN 166.

Body protection
Wear suitable protective clothing. For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes).

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 section 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:	**colourless**
Odour:	**poor**
Odour threshold:	**not determined**
pH at 20 °C:	**not applicable**
Melting point/freezing point:	**not applicable**
Initial boiling point and boiling range:	**not determined**
Flash point:	**> 101 °C** Method: DIN 53213
flammability	
Burning time:	**not applicable**
Upper/lower flammability or explosive limits:	
Lower explosion limit:	**not determined**
Upper explosion limit:	**not determined**
Vapour pressure at 20 °C:	**0,2971 mbar**
Relative density:	
Density at 20 °C:	**1,11 g/cm³** Method: calculated
Solubility(ies):	
Water solubility at 20 °C:	**insoluble**
Partition coefficient: n-octanol/water:	**see section 12**
Auto-ignition temperature:	**not determined**
Decomposition temperature:	**not applicable**
Viscosity at 40 °C:	**> 20,5 mm²/s**
Explosive properties:	**not applicable**
Oxidising properties:	**not applicable**

9.2. **Other information**

Solvent	
Organic solvents:	**0 weight-%**

SECTION 10: Stability and reactivity

10.1. **Reactivity**
No information available.

10.2. **Chemical stability**
Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to

section 7.

10.3. **Possibility of hazardous reactions**
Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

10.4. **Conditions to avoid**
Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7.

10.5. **Incompatible materials**
not applicable

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

SECTION 11: Toxicological information

Classification according to Regulation (EC) No 1272/2008 [CLP]
No data on preparation itself available.

11.1. **Information on toxicological effects**

Acute toxicity

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane
oral, LD50, Rat: 15000 mg/kg
dermal, LD50, Rabbit: 23000 mg/kg

reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2)
oral, LD50, Rat: 2190 mg/kg

Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-((2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl)oxirane
oral, LD50, Rat: > 5000 mg/kg
dermal, LD50, Rat: > 2000 mg/kg

Skin corrosion/irritation; Serious eye damage/eye irritation

Causes skin irritation.

Causes serious eye irritation.

Respiratory or skin sensitisation

May cause an allergic skin reaction.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Based on available data, the classification criteria are not met.

STOT-single exposure; 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.

Practical experience/human evidence

No information available.

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.

SECTION 12: Ecological information

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**

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane
Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): 2 mg/L (96 h)
Daphnia toxicity, EC50, Daphnia magna: 1,8 mg/L (48 h)
Algae toxicity, ErC50: 11 mg/L (72 h)

reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2)
Fish toxicity, LC50, Leuciscus idus (golden orfe): 30 mg/L (96 h)
Daphnia toxicity, EC50, Daphnia magna: 47 mg/L (48 h)
Algae toxicity, ErC50: 23,1 mg/L (48 h)

Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-((2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl)oxirane
Fish toxicity, LC50, fish: 2,54 mg/L (96 h)

Long-term Ecotoxicity

Toxic to aquatic life with long lasting effects.

12.2. **Persistence and degradability**
Toxicological data are not available.

12.3. **Bioaccumulative potential**
Toxicological data are not available.

Bioconcentration factor (BCF)

Toxicological data are not available.

12.4. **Mobility in soil**
Toxicological data are not 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**

waste code, VeVA/LVA
Appropriate disposal / Product, Recommendation
08 04 09: [S] waste adhesives and sealants containing organic solvents or other dangerous substances

Appropriate disposal / Package, Recommendation
Contaminated packages
15 01 10*: packaging containing residues of dangerous substances or contaminated by dangerous substances
Non-contaminated packages may be recycled.

Additional information
Do not empty into drains; dispose of this material and its container in a safe way. Dispose of waste according to applicable legislation.

SECTION 14: Transport information

14.1. **UN number**

UN 3082

14.2. **UN proper shipping name**

Land transport (ADR/RID):	Environmentally hazardous substance, liquid, n.o.s. (EPOXIDE RESIN)
Sea transport (IMDG):	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXIDE RESIN)
Air transport (ICAO-TI / IATA-DGR):	Environmentally hazardous substance, liquid, n.o.s. (EPOXIDE RESIN)

14.3. **Transport hazard class(es)**

9

14.4. **Packing group**

III

14.5. **Environmental hazards**

Land transport (ADR/RID)	UMWELTGEFÄHRDEND
Marine pollutant	p / EPOXIDE RESIN

14.6. **Special precautions for user**

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.
Advices on safe handling: see parts 6 - 8

Further information

Land transport (ADR/RID)

tunnel restriction code -

Sea transport (IMDG)

EmS-No. F-A, S-F

Air transport (ICAO-TI / IATA-DGR)

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

not applicable

SECTION 15: Regulatory information

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

EU legislation
VOC-EU (solvent): not applicable

National regulations
without VOC tax
Water hazard class: 3

Other regulations, restrictions and prohibition regulations
Observe employment restrictions for young people at work. Observe employment restrictions for child bearing mothers and nursing mothers.

15.2. **Chemical Safety Assessment**
Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Full text of classification in section 3:

Skin Irrit. 2 / H315	Skin corrosion/irritation	Causes skin irritation.
Eye Irrit. 2 / H319	Serious eye damage/eye irritation	Causes serious eye irritation.
Skin Sens. 1 / H317	Respiratory or skin sensitisation	May cause an allergic skin reaction.
Aquatic Chronic 3 / H412	Hazardous to the aquatic environment	Harmful to aquatic life with long lasting effects.
Aquatic Chronic 2 / H411	Hazardous to the aquatic environment	Toxic to aquatic life with long lasting effects.
Asp. Tox. 1 / H304	Aspiration hazard	May be fatal if swallowed and enters airways.
Aquatic Chronic 1 / H410	Hazardous to the aquatic environment	Very toxic to aquatic life with long lasting effects.

Classification procedure
Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Skin Irrit. 2	Skin corrosion/irritation	Calculation method.
Eye Irrit. 2	Serious eye damage/eye irritation	Calculation method.
Skin Sens. 1	Respiratory or skin sensitisation	Calculation method.
Aquatic Chronic 2	Hazardous to the aquatic environment	Calculation method.

Abbreviations and acronyms

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
OEL	Occupational Exposure Limit Value
BLV	Biological Limit Value
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
CMR	Carcinogenic, Mutagenic and Reprotoxic
DIN	German Institute for Standardization / German industrial standard
DNEL	Derived No-Effect Level
EAKV	European Waste Catalogue Directive

EC	Effective Concentration
EC	European Community
EN	European Standard
IATA-DGR	International Air Transport Association – Dangerous Goods Regulations
IBC Code	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
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
ISO	International Organization for Standardization
LC	Lethal Concentration
LD	Lethal Dose
MARPOL	Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
OECD	Organisation for Economic Cooperation and Development
PBT	persistent, bioaccumulative, toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
UN	United Nations
VOC	Volatile Organic Compounds
vPvB	very persistent and very bioaccumulative

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 section 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.