

# WESSEX

RESINS+ADHESIVES

## SAFETY DATA SHEET

### WEST SYSTEM 205 HARDENER

According to Regulation (EC) No 1907/2006, Annex II, as amended by Regulation (EU) No 453/2010

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

##### 1.1. Product identifier

Product name WEST SYSTEM 205 HARDENER  
Product number 205

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

Identified uses Hardener.  
Uses advised against No specific uses advised against are identified.

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

Supplier Suter Kunststoffe AG  
Aefligenstrasse 3  
CH - 3312 Fraubrunnen  
  
Tel: +41 (0)31 763 60 60  
Fax: +41 (0)31 763 60 61  
info@swiss-composite.ch

##### 1.4. Emergency telephone number

Emergency telephone 145 Tox Info Schweiz

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

###### Classification

###### Physical hazards

Not Classified

###### Health hazards

Acute Tox. 4 - H302 Acute Tox. 4 - H312 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Muta. 2 - H341

###### Environmental hazards

Aquatic Chronic 3 - H412

###### Classification (67/548/EEC or 1999/45/EC)

Xn; R21/22. C; R34. Muta. Cat. 3 R68. R52/53, R43

###### Human health

Corrosive to skin and eyes. The product contains a sensitising substance. Suspected of causing genetic defects. See Section 11 for additional information on health hazards.

###### Environmental

The product contains a substance which may have hazardous effects on the environment.

##### 2.2. Label elements

###### Pictogram

## WEST SYSTEM 205 HARDENER



Signal word



Danger



### Hazard statements

- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- H341 Suspected of causing genetic defects.
- H412 Harmful to aquatic life with long lasting effects.
- H302+H312 Harmful if swallowed or in contact with skin.

### Precautionary statements

- P102 Keep out of reach of children.
- P201 Obtain special instructions before use.
- P273 Avoid release to the environment.
- P280 Wear protective gloves, eye and face protection.
- P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P310 Immediately call a POISON CENTER/doctor.
- P501 Dispose of contents/container in accordance with national regulations.

### Contains

FORMALDEHYDE POLYMER WITH PHENOL & TETA, TETRAETHYLENEPENTAMINE, TRIETHYLENETETRAMINE, PHENOL

### Supplementary precautionary statements

- P202 Do not handle until all safety precautions have been read and understood.
- P261 Avoid breathing vapour/spray.
- P264 Wash contaminated skin thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P405 Store locked up.

### 2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

**WEST SYSTEM 205 HARDENER**

<b>FORMALDEHYDE POLYMER WITH PHENOL &amp; TETA</b>		<b>30-60%</b>
<b>CAS number:</b> 32610-77-8 <b>EC number:</b> 500-083-8		
<b>Classification</b>	<b>Classification (67/548/EEC or 1999/45/EC)</b>	
Acute Tox. 4 - H302	Xn;R21/22. C;R34. R43,R52/53.	
Acute Tox. 4 - H312		
Skin Corr. 1B - H314		
Eye Dam. 1 - H318		
Skin Sens. 1 - H317		
Aquatic Chronic 3 - H412		
<b>TETRAETHYLENEPENTAMINE</b>		<b>10-30%</b>
<b>CAS number:</b> 112-57-2 <b>EC number:</b> 203-986-2		
<b>Classification</b>	<b>Classification (67/548/EEC or 1999/45/EC)</b>	
Acute Tox. 4 - H302	C;R34 Xn;R21/22 R43 N;R51/53	
Acute Tox. 4 - H312		
Skin Corr. 1B - H314		
Eye Dam. 1 - H318		
Skin Sens. 1 - H317		
Aquatic Chronic 2 - H411		
<b>TRIETHYLENETETRAMINE</b>		<b>5-10%</b>
<b>CAS number:</b> 112-24-3 <b>EC number:</b> 203-950-6		
<b>Classification</b>	<b>Classification (67/548/EEC or 1999/45/EC)</b>	
Acute Tox. 4 - H312	C;R34 Xn;R21 R43 R52/53	
Skin Corr. 1B - H314		
Eye Dam. 1 - H318		
Skin Sens. 1 - H317		
Aquatic Chronic 3 - H412		
<b>PHENOL</b>		<b>1-5%</b>
<b>CAS number:</b> 108-95-2 <b>EC number:</b> 203-632-7		
<b>Classification</b>	<b>Classification (67/548/EEC or 1999/45/EC)</b>	
Acute Tox. 3 - H301	Muta. Cat. 3;R68 T;R23/24/25 C;R34 Xn;R48/20/21/22	
Acute Tox. 3 - H311		
Acute Tox. 3 - H331		
Skin Corr. 1B - H314		
Eye Dam. 1 - H318		
Muta. 2 - H341		
STOT RE 2 - H373		

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

**SECTION 4: First aid measures****4.1. Description of first aid measures****General information**

Get medical attention immediately. Show this Safety Data Sheet to the medical personnel. Chemical burns must be treated by a physician.

**Inhalation**

## WEST SYSTEM 205 HARDENER

Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Place unconscious person on their side in the recovery position and ensure breathing can take place. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.

### Ingestion

Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Place unconscious person on their side in the recovery position and ensure breathing can take place. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.

### Skin contact

It is important to remove the substance from the skin immediately. Take off immediately all contaminated clothing. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes and get medical attention.

### Eye contact

May cause permanent damage if eye is not immediately irrigated. Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of water. Continue to rinse for at least 10 minutes. Get medical attention if irritation persists after washing.

### Protection of first aiders

First aid personnel should wear appropriate protective equipment during any rescue. Wash contaminated clothing thoroughly with water before removing it from the affected person, or wear gloves. It may be dangerous for first aid personnel to carry out mouth-to-mouth resuscitation.

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

### General information

See Section 11 for additional information on health hazards. The severity of the symptoms described will vary dependent on the concentration and the length of exposure. Suspected of causing genetic defects.

### Inhalation

Corrosive to the respiratory tract. Symptoms following overexposure may include the following: Severe irritation of nose and throat. May cause coughing and difficulties in breathing.

### Ingestion

Harmful if swallowed. May cause chemical burns in mouth, oesophagus and stomach. Symptoms following overexposure may include the following: Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation. Severe stomach pain. Nausea, vomiting.

### Skin contact

Harmful in contact with skin. Causes severe burns. Symptoms following overexposure may include the following: Pain or irritation. Redness. Blistering may occur. May cause sensitisation by skin contact.

### Eye contact

Causes serious eye damage. Symptoms following overexposure may include the following: Pain. Profuse watering of the eyes.

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

### Notes for the doctor

Treat symptomatically.

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## SECTION 5: Firefighting measures

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### 5.1. Extinguishing media

#### Suitable extinguishing media

The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

#### Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

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

#### Specific hazards

## WEST SYSTEM 205 HARDENER

None known.

### Hazardous combustion products

Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapours. Carbon dioxide (CO<sub>2</sub>). Carbon monoxide (CO).

### 5.3. Advice for firefighters

#### Protective actions during firefighting

Avoid breathing fire gases or vapours. Ventilate closed spaces before entering them. Evacuate area. Keep upwind to avoid inhalation of gases, vapours, fumes and smoke. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Control run-off water by containing and keeping it out of sewers and watercourses.

#### Special protective equipment for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

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## SECTION 6: Accidental release measures

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

#### Personal precautions

No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Follow precautions for safe handling described in this safety data sheet. Wear protective clothing as described in Section 8 of this safety data sheet. Take care as floors and other surfaces may become slippery. Do not touch or walk into spilled material. Provide adequate ventilation. Avoid inhalation of vapours. Avoid contact with skin and eyes. Wash thoroughly after dealing with a spillage.

### 6.2. Environmental precautions

#### Environmental precautions

The product may affect the acidity (pH) of water which may have hazardous effects on aquatic organisms. Avoid discharge into drains or watercourses or onto the ground.

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

#### Methods for cleaning up

Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. This product is corrosive. Small Spillages: Collect spillage. Large Spillages: Absorb spillage with non-combustible, absorbent material. The contaminated absorbent may pose the same hazard as the spilled material. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dangerous for the environment. For waste disposal, see Section 13.

### 6.4. Reference to other sections

#### Reference to other sections

For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

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## SECTION 7: Handling and storage

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### 7.1. Precautions for safe handling

#### Usage precautions

Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Handle all packages and containers carefully to minimise spills. Keep container tightly sealed when not in use. Avoid contact with skin and eyes. Avoid inhalation of vapours. Provide adequate ventilation. Do not handle until all safety precautions have been read and understood.

#### Advice on general occupational hygiene

Wash promptly if skin becomes contaminated. Remove contaminated clothing and protective equipment before entering eating areas. Wash at the end of each work shift and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product. Change work clothing daily before leaving workplace.

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

## WEST SYSTEM 205 HARDENER

### Storage precautions

Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep away from heat, sparks and open flame. Keep separate from food, feedstuffs, fertilisers and other sensitive material. Protect from light. Store away from the following materials: Acids. Alkalis. Oxidising materials.

### 7.3. Specific end use(s)

#### Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

## SECTION 8: Exposure Controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

#### PHENOL

Long-term exposure limit (8-hour TWA): WEL 2 ppm 7.8 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 4 ppm 16 mg/m<sup>3</sup>

Sk

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

### 8.2. Exposure controls

#### Protective equipment



#### Appropriate engineering controls

Provide adequate ventilation. Personal protective equipment should only be used if worker exposure cannot be controlled adequately by the engineering control measures. Ensure control measures are regularly inspected and maintained.

#### Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Wear chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.

#### Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacture, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with European Standard EN374. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.

#### Other skin and body protection

Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.

#### Hygiene measures

Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. When using do not eat, drink or smoke. Wash at the end of each work shift and before eating, smoking and using the toilet. Warn cleaning personnel of any hazardous properties of the product.

#### Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. Check that the respirator fits tightly and the filter is changed regularly.

#### Environmental exposure controls

Avoid discharge to the aquatic environment. Keep container tightly sealed when not in use.

## SECTION 9: Physical and Chemical Properties

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

## WEST SYSTEM 205 HARDENER

### Appearance

Clear liquid.

### Colour

Light (or pale). Amber.

### Odour

Amine.

### Odour threshold

Not determined.

### pH

Not determined.

### Melting point

Not determined.

### Initial boiling point and range

Not determined.

### Flash point

> 100°C CC (Closed cup).

### Evaporation rate

Not determined.

### Evaporation factor

Not determined.

### Upper/lower flammability or explosive limits

Not determined.

### Vapour pressure

Not determined.

### Vapour density

Not determined.

### Relative density

1.05 @ 20°C

### Bulk density

Not determined.

### Solubility(ies)

Slightly soluble in water.

### Partition coefficient

Not determined.

### Auto-ignition temperature

Not determined.

### Decomposition Temperature

Not determined.

### Viscosity

600 mPa s @ 25°C

### Explosive properties

Not determined.

### Oxidising properties

Does not meet the criteria for classification as oxidising.

### 9.2. Other information

#### Other information

Not known.

## WEST SYSTEM 205 HARDENER

### SECTION 10: Stability and reactivity

#### **10.1. Reactivity**

There are no known reactivity hazards associated with this product.

#### **10.2. Chemical stability**

##### **Stability**

Stable at normal ambient temperatures and when used as recommended.

#### **10.3. Possibility of hazardous reactions**

None known.

#### **10.4. Conditions to avoid**

There are no known conditions that are likely to result in a hazardous situation.

#### **10.5. Incompatible materials**

##### **Materials to avoid**

Strong acids. Strong alkalis. Strong oxidising agents.

#### **10.6. Hazardous decomposition products**

Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapours. Carbon dioxide (CO<sub>2</sub>). Carbon monoxide (CO).

### SECTION 11: Toxicological information

#### **11.1. Information on toxicological effects**

##### **Acute toxicity - oral**

Acute Tox. 4 - H302 Harmful if swallowed.

##### **ATE oral (mg/kg)**

570.77625571

##### **Acute toxicity - dermal**

Acute Tox. 4 - H312 Harmful in contact with skin.

##### **ATE dermal (mg/kg)**

1218.25162434

##### **Acute toxicity - inhalation**

Based on available data the classification criteria are not met.

##### **ATE inhalation (vapours mg/l)**

76.53061224

##### **Skin corrosion/irritation**

##### **Animal data**

Skin Corr. 1B - H314 Causes burns.

##### **Serious eye damage/irritation**

Eye Dam. 1 - H318 Causes serious eye damage.

##### **Respiratory sensitisation**

Based on available data the classification criteria are not met.

##### **Skin sensitisation**

Skin Sens. 1 - H317 May cause skin sensitisation or allergic reactions in sensitive individuals.

##### **Germ cell mutagenicity**

##### **Genotoxicity - in vitro**

Muta. 2 - H341 Suspected of causing genetic defects.

##### **Carcinogenicity**

Based on available data the classification criteria are not met.

##### **Reproductive toxicity**

## WEST SYSTEM 205 HARDENER

### Reproductive toxicity - fertility

Based on available data the classification criteria are not met.

### Reproductive toxicity - development

Based on available data the classification criteria are not met.

### Specific target organ toxicity - single exposure

#### STOT - single exposure

Based on available data the classification criteria are not met.

### Specific target organ toxicity - repeated 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.

### Inhalation

Corrosive to the respiratory tract. Symptoms following overexposure to vapour may include the following: Severe irritation of nose and throat. May cause coughing and difficulties in breathing.

### Ingestion

Harmful if swallowed. May cause chemical burns in mouth, oesophagus and stomach. Symptoms following overexposure may include the following: Severe stomach pain. Nausea, vomiting.

### Skin contact

Harmful in contact with skin. Causes severe burns. Symptoms following overexposure may include the following: Pain or irritation. Redness. Blistering may occur.

### Eye contact

Causes serious eye damage. Symptoms following overexposure may include the following: Pain. Profuse watering of the eyes. Redness.

### Acute and chronic health hazards

Suspected of causing genetic defects.

### Route of entry

Ingestion Inhalation Skin and/or eye contact

### Toxicological information on ingredients.

#### FORMALDEHYDE POLYMER WITH PHENOL & TETA

##### Toxicological effects

No information available.

#### TETRAETHYLENEPENTAMINE

##### Toxicological effects

No information available.

##### Acute toxicity - oral

###### ATE oral (mg/kg)

500

##### Acute toxicity - dermal

###### ATE dermal (mg/kg)

1100

**WEST SYSTEM 205 HARDENER**  
**TRIETHYLENETETRAMINE**

**Toxicological effects**

No information available.

**Acute toxicity - dermal****ATE dermal (mg/kg)**

1100

**PHENOL**

**Acute toxicity - oral**

Toxic if swallowed.

**ATE oral (mg/kg)**

100

**Acute toxicity - dermal**

Toxic in contact with skin.

**ATE dermal (mg/kg)**

300

**Acute toxicity - inhalation**

Toxic if inhaled.

**ATE inhalation (vapours mg/l)**

3.0

**Skin corrosion/irritation****Animal data**

Dose: , 24 hr, Rabbit Erythema/eschar score: Severe erythema (beef redness) to eschar formation preventing grading of erythema (4). REACH dossier information. Corrosive to skin.

**Human skin model test**

Cell Viability 8.6 1 hour REACH dossier information. Corrosive to skin.

**Serious eye damage/irritation**

Corrosive to skin. Corrosivity to eyes is assumed. No testing is needed.

**Respiratory sensitisation**

No information available.

**Skin sensitisation**

Buehler test: - Guinea pig: Not sensitising. REACH dossier information. Epidemiological studies have shown no evidence of skin sensitisation.

**Germ cell mutagenicity****Genotoxicity - in vitro**

Chromosome aberration: Positive. REACH dossier information. Possible risk of irreversible effects.

**Genotoxicity - in vivo**

Chromosome aberration: Positive. REACH dossier information. Possible risk of irreversible effects.

**Carcinogenicity**

NOAEL 5000 ppm, Oral, Rat REACH dossier information. There is no evidence that the product can cause cancer.

**Reproductive toxicity****Reproductive toxicity - fertility**

Two-generation study - NOAEL 1000 mg/l, Oral, Rat P REACH dossier information. Based on available data the classification criteria are not met.

**Reproductive toxicity - development**

Developmental toxicity: - NOAEL: 140 mg/kg/day, Oral, Mouse REACH dossier information. Based on available data the classification criteria are not met.

## WEST SYSTEM 205 HARDENER

### Specific target organ toxicity - single exposure

#### **STOT - single exposure**

Not classified as a specific target organ toxicant after a single exposure.

### Specific target organ toxicity - repeated exposure

#### **STOT - repeated exposure**

NOAEL 450 mg/kg, Oral, Rat REACH dossier information. May cause damage to organs through prolonged or repeated exposure.

#### **Target organs**

Central nervous system Kidneys Liver Skin

### Aspiration hazard

Based on available data the classification criteria are not met.

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## SECTION 12: Ecological Information

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### **Ecotoxicity**

Dangerous for the environment if discharged into watercourses.

### **12.1. Toxicity**

Aquatic Chronic 3 - H412 Harmful to aquatic life with long lasting effects.

#### **Ecological information on ingredients.**

#### **FORMALDEHYDE POLYMER WITH PHENOL & TETA**

There are no data on the ecotoxicity of this product.

#### **TETRAETHYLENEPENTAMINE**

There are no data on the ecotoxicity of this product.

#### **TRIETHYLENETETRAMINE**

There are no data on the ecotoxicity of this product.

#### **PHENOL**

#### **Acute toxicity - fish**

LC<sub>50</sub>, 96 hours: 67.5 mg/l, Pimephales promelas (Fat-head Minnow) REACH dossier information.

#### **Acute toxicity - aquatic invertebrates**

EC<sub>50</sub>, 48 hours: 3.1 mg/l, Freshwater invertebrates REACH dossier information.

#### **Acute toxicity - aquatic plants**

EC<sub>50</sub>, 96 hours: 61.1 mg/l, Freshwater algae REACH dossier information.

#### **Acute toxicity - microorganisms**

EC<sub>20</sub>, 30 minutes: 100 mg/l, Activated sludge REACH dossier information.

### **12.2. Persistence and degradability**

#### **Persistence and degradability**

There are no data on the degradability of this product.

## WEST SYSTEM 205 HARDENER

### Ecological information on ingredients.

#### FORMALDEHYDE POLYMER WITH PHENOL & TETA

##### **Persistence and degradability**

There are no data on the degradability of this product.

#### TETRAETHYLENEPENTAMINE

##### **Persistence and degradability**

There are no data on the degradability of this product.

#### TRIETHYLENETETRAMINE

##### **Persistence and degradability**

There are no data on the degradability of this product.

#### PHENOL

##### **Phototransformation**

Air. - Degradation (%) 50: 14 hours REACH dossier information.

##### **Biodegradation**

water - Degradation (%) 62: 100 hours REACH dossier information. The substance is readily biodegradable.

### **12.3. Bioaccumulative potential**

No data available on bioaccumulation.

#### **Partition coefficient**

Not determined.

### Ecological information on ingredients.

#### FORMALDEHYDE POLYMER WITH PHENOL & TETA

No data available on bioaccumulation.

#### TETRAETHYLENEPENTAMINE

No data available on bioaccumulation.

#### TRIETHYLENETETRAMINE

No data available on bioaccumulation.

#### PHENOL

The product is not bioaccumulating. BCF: 17.5, Brachydanio rerio (Zebra Fish) REACH dossier information.

#### **Partition coefficient**

log Pow: 1.47 REACH dossier information.

### **12.4. Mobility in soil**

#### **Mobility**

No information available.

## WEST SYSTEM 205 HARDENER

### Ecological information on ingredients.

#### FORMALDEHYDE POLYMER WITH PHENOL & TETA

##### **Mobility**

No information available.

#### TETRAETHYLENEPENTAMINE

##### **Mobility**

No information available.

#### TRIETHYLENETETRAMINE

##### **Mobility**

No information available.

#### PHENOL

##### **Mobility**

The product is soluble in water.

##### **Adsorption/desorption coefficient**

Soil - Koc: < 91 @ 25°C REACH dossier information.

##### **Henry's law constant**

0.022 Pa m<sup>3</sup>/mol @ 20°C Estimated value. REACH dossier information.

##### **Surface tension**

71.3 mN/m @ 20°C REACH dossier information.

### 12.5. Results of PBT and vPvB assessment

This product does not contain any substances classified as PBT or vPvB.

### Ecological information on ingredients.

#### FORMALDEHYDE POLYMER WITH PHENOL & TETA

This substance is not classified as PBT or vPvB according to current EU criteria.

#### TETRAETHYLENEPENTAMINE

This substance is not classified as PBT or vPvB according to current EU criteria.

#### TRIETHYLENETETRAMINE

This substance is not classified as PBT or vPvB according to current EU criteria.

#### PHENOL

This substance is not classified as PBT or vPvB according to current EU criteria.

### 12.6. Other adverse effects

None known.

### Ecological information on ingredients.

#### PHENOL

None known.

## **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

#### **General information**

The generation of waste should be minimised or avoided wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.

## WEST SYSTEM 205 HARDENER

### Disposal methods

Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Incineration or landfill should only be considered when recycling is not feasible. Do not discharge into drains or watercourses or onto the ground.

### Waste class

07 07 99

## SECTION 14: Transport information

### 14.1. UN number

UN No. (ADR/RID)	2735
UN No. (IMDG)	2735
UN No. (ICAO)	2735
UN No. (ADN)	2735

### 14.2. UN proper shipping name

Proper shipping name (ADR/RID)	AMINES, LIQUID, CORROSIVE, N.O.S. (FORMALDEHYDE POLYMER WITH PHENOL & TETA, TETRAETHYLENEMPENTAMINE)
Proper shipping name (IMDG)	AMINES, LIQUID, CORROSIVE, N.O.S. (FORMALDEHYDE POLYMER WITH PHENOL & TETA, TETRAETHYLENEMPENTAMINE)
Proper shipping name (ICAO)	AMINES, LIQUID, CORROSIVE, N.O.S. (FORMALDEHYDE POLYMER WITH PHENOL & TETA, TETRAETHYLENEMPENTAMINE)
Proper shipping name (ADN)	AMINES, LIQUID, CORROSIVE, N.O.S. (FORMALDEHYDE POLYMER WITH PHENOL & TETA, TETRAETHYLENEMPENTAMINE)

### 14.3. Transport hazard class(es)

ADR/RID class	8
ADR/RID subsidiary risk	
ADR/RID label	8
IMDG class	8
IMDG subsidiary risk	
ICAO class/division	8
ICAO subsidiary risk	

#### Transport labels



### 14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ICAO packing group	III
ADN packing group	III

### 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

### 14.6. Special precautions for user

EmS	F-A, S-B
ADR transport category	3

**WEST SYSTEM 205 HARDENER**

**Emergency Action Code** 2X  
**Hazard Identification Number (ADR/RID)** 80  
**Tunnel restriction code** (E)

**14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

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

Health and Safety at Work etc. Act 1974 (as amended). The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716). The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"]. EH40/2005 Workplace exposure limits.

**EU legislation**

Dangerous Preparations Directive 1999/45/EC. Dangerous Substances Directive 67/548/EEC. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

**15.2. Chemical safety assessment**

No chemical safety assessment has been carried out.

**SECTION 16: Other information****Classification procedures according to Regulation (EC) 1272/2008**

Acute Tox. 4 - H302, Acute Tox. 4 - H312, Skin Corr. 1B - H314, Eye Dam. 1 - H318, Skin Sens. 1 - H317, Muta. 2 - H341, Aquatic Chronic 3 - H412: Calculation method.

**Revision date** 12/01/2015  
**Supersedes date** 30/09/2013  
**SDS number** 10668

**Risk phrases in full**

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.  
R21 Harmful in contact with skin.  
R21/22 Harmful in contact with skin and if swallowed.  
R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.  
R34 Causes burns.  
R43 May cause sensitisation by skin contact.  
R48/20/21/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.  
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R68 Possible risk of irreversible effects.

**Hazard statements in full**

## WEST SYSTEM 205 HARDENER

- H301 Toxic if swallowed.
- H302 Harmful if swallowed.
- H311 Toxic in contact with skin.
- H312 Harmful in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H331 Toxic if inhaled.
- H341 Suspected of causing genetic defects.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H411 Toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.

### Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.