

# SAFETY DATA SHEET

## WEST SYSTEM 105 RESIN

According to Regulation (EC) No 1907/2006

### 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME WEST SYSTEM 105 RESIN

PRODUCT NO. 105

SUPPLIER Wessex Resins & Adhesives Limited  
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Cupernham Lane  
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S051 7LF  
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### 2 HAZARDS IDENTIFICATION

May cause sensitisation by skin contact. Irritating to eyes and skin. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

CLASSIFICATION Xi;R36/38. R43. N;R51/53.

### 3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification
EPOXY RESIN (Number average MW <= 700 )	500-033-5	25068-38-6	60-100%	R43 Xi;R36/38 N;R51/53
BENZYL ALCOHOL	202-859-9	100-51-6	10-30%	Xn;R20/22
BISPHENOL F EPOXY RESIN		28064-14-4	1-5%	Xi;R36/38. N;R51/53. R43.
ISO-BUTANOL	201-148-0	78-83-1	< 1	R10 Xi;R37/38,R41 R67

The Full Text for all R-Phrases are Displayed in Section 16

### 4 FIRST-AID MEASURES

#### INHALATION

Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

#### INGESTION

Do not induce vomiting. Immediately rinse mouth and drink plenty of water (200-300 ml). Get medical attention.

#### SKIN CONTACT

Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation persists after washing.

#### EYE CONTACT

Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

### 5 FIRE-FIGHTING MEASURES

#### EXTINGUISHING MEDIA

Carbon dioxide (CO2). Dry chemicals, sand, dolomite etc. Foam. DO NOT use water if avoidable.

#### SPECIAL FIRE FIGHTING PROCEDURES

Move container from fire area if it can be done without risk. Water spray should be used to cool containers. Cool containers exposed to flames with water until well after the fire is out. Keep run-off water out of sewers and water sources. Dike for water control.

#### SPECIFIC HAZARDS

In case of fire, toxic gases may be formed. Fire creates: Carbon monoxide (CO). Carbon dioxide (CO2).

#### PROTECTIVE MEASURES IN FIRE

Use protective equipment appropriate for surrounding materials. Self contained breathing apparatus and full protective clothing must be worn in case of fire.

### 6 ACCIDENTAL RELEASE MEASURES

## WEST SYSTEM 105 RESIN

### PERSONAL PRECAUTIONS

In case of spills, beware of slippery floors and surfaces. Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation. Wear protective clothing as described in Section 8 of this safety data sheet.

### ENVIRONMENTAL PRECAUTIONS

Avoid release to the environment. Do not discharge into drains, water courses or onto the ground. Contain spillages with sand, earth or any suitable adsorbent material. The product should not be dumped in nature but collected and delivered according to agreement with the local authorities.

### SPILL CLEAN UP METHODS

Wear necessary protective equipment. Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Runoff or release to sewer, waterway or ground is forbidden. Flush area clean with lots of water. Be aware of potential for surfaces to become slippery.

## 7 HANDLING AND STORAGE

### USAGE PRECAUTIONS

Avoid spilling, skin and eye contact. Keep away from heat, sparks and open flame. Do not eat, drink or smoke when using the product. Avoid inhalation of vapours.

### STORAGE PRECAUTIONS

Store in tightly closed original container in a dry, cool and well-ventilated place. 10 - 30 °C Keep away from heat, sparks and open flame. Keep separate from food, feedstuffs, fertilisers and other sensitive material. Protect from light, including direct sunrays. Store separated from: Acids. Alkalies. Oxidising material.

### STORAGE CLASS

Chemical storage.

## 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Name	Std	TWA - 8 hrs		STEL - 15 min		Notes
ISO-BUTANOL	WEL	50 ppm	154 mg/m3	75 ppm	231 mg/m3	

WEL = Workplace Exposure Limit.

### PROTECTIVE EQUIPMENT



### PROCESS CONDITIONS

Provide eyewash station.

### ENGINEERING MEASURES

Provide adequate general and local exhaust ventilation.

### RESPIRATORY EQUIPMENT

No specific recommendation made, but respiratory protection may still be required under exceptional circumstances when excessive air contamination exists. Chemical respirator with organic vapour cartridge.

### HAND PROTECTION

Use protective gloves. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

### EYE PROTECTION

Wear splash-proof eye goggles to prevent any possibility of eye contact.

### HYGIENE MEASURES

Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap & water if skin becomes contaminated. When using do not eat, drink or smoke.

### SKIN PROTECTION

Wear apron or protective clothing in case of splashes.

## 9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Clear liquid
COLOUR	Light (or pale) Amber
ODOUR	Mild

## WEST SYSTEM 105 RESIN

SOLUBILITY Slightly soluble in water.  
RELATIVE DENSITY 1.16 20 FLASH POINT (°C) > 100 CC (Closed cup).

### 10 STABILITY AND REACTIVITY

#### STABILITY

Stable under normal temperature conditions and recommended use.

#### CONDITIONS TO AVOID

Avoid heat, flames and other sources of ignition.

#### MATERIALS TO AVOID

Strong acids. Strong alkalis. Strong oxidising substances.

#### HAZARDOUS DECOMPOSITION PRODUCTS

In case of fire, toxic gases may be formed. Fire creates: Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

### 11 TOXICOLOGICAL INFORMATION

#### INHALATION

Not relevant at normal room temperatures. When heated, irritating vapours may be formed.

#### INGESTION

May cause discomfort if swallowed.

#### SKIN CONTACT

Irritating to skin. May cause sensitisation by skin contact. May cause skin irritation/eczema

#### EYE CONTACT

Irritating to eyes.

#### ROUTE OF ENTRY

Skin and/or eye contact.

#### TARGET ORGANS

Skin. Eyes.

#### MEDICAL SYMPTOMS

Upper respiratory irritation. Skin irritation. Skin contact may cause: Allergic rash. Eye contact may cause: Irritation of eyes and mucous membranes. May cause discomfort if swallowed.

#### MEDICAL CONSIDERATIONS

Skin disorders and allergies. Persons with rash are directed to skin expert for examination of allergic eczema.

### 12 ECOLOGICAL INFORMATION

#### ECOTOXICITY

The product contains a substance which is toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

#### BIOACCUMULATION

No data available on bioaccumulation.

#### DEGRADABILITY

No data available.

### 13 DISPOSAL CONSIDERATIONS

#### DISPOSAL METHODS

Do not allow runoff to sewer, waterway or ground. Dispose of waste and residues in accordance with local authority requirements.

### 14 TRANSPORT INFORMATION



**WEST SYSTEM 105 RESIN**

UK ROAD CLASS	9		
PROPER SHIPPING NAME	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN (Number average MW <= 700 ), BISPHENOL F EPOXY RESIN)		
UN NO. ROAD	3082	UK ROAD PACK GR.	III
ADR CLASS NO.	9	ADR CLASS	Class 9: Miscellaneous dangerous substances and articles.
ADR PACK GROUP	III	TUNNEL RESTRICTION CODE	(E)
HAZARD No. (ADR)	90	ADR LABEL NO.	9
HAZCHEM CODE	3Z	CEFIC TEC(R) NO.	90GM6-III
RID CLASS NO.	9	RID PACK GROUP	III
UN NO. SEA	3082	IMDG CLASS	9
IMDG PAGE NO.	9	IMDG PACK GR.	III
EMS	F-A, S-F	MFAG	See Guide
UN NO. AIR	3082	AIR CLASS	9
AIR PACK GR.	III		

**15 REGULATORY INFORMATION**

**LABELLING**



Irritant



Dangerous for the environment

**CONTAINS** EPOXY RESIN (Number average MW <= 700 )  
BISPHENOL F EPOXY RESIN

**RISK PHRASES**

- R43 May cause sensitisation by skin contact.
- R36/38 Irritating to eyes and skin.
- R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**SAFETY PHRASES**

- S2 Keep out of the reach of children
- S24/25 Avoid contact with skin and eyes.
- S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
- S46 If swallowed, seek medical advice immediately and show this container or label.
- S60 This material and its container must be disposed of as hazardous waste.
- P5 Contains epoxy constituents. See information supplied by the manufacturer.

**UK REGULATORY REFERENCES**

Health and Safety at Work Act 1974.

**EU DIRECTIVES**

System of specific information relating to Dangerous Preparations. 2001/58/EC. Dangerous Substance Directive 67/548/EEC. 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), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

**STATUTORY INSTRUMENTS**

Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 (SI 1689)

**APPROVED CODE OF PRACTICE**

Control of Substances Hazardous to Health Regulations 2002.

**GUIDANCE NOTES**

Workplace Exposure Limits EH40.

**16 OTHER INFORMATION**

## WEST SYSTEM 105 RESIN

SDS NO. 10015

### SAFETY DATA SHEET STATUS

Approved.

### RISK PHRASES IN FULL

R10	Flammable.
R20/22	Harmful by inhalation and if swallowed.
R36/38	Irritating to eyes and skin.
R37/38	Irritating to respiratory system and skin.
R41	Risk of serious damage to eyes.
R43	May cause sensitisation by skin contact.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R67	Vapours may cause drowsiness and dizziness.

### 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.

# SAFETY DATA SHEET

## WEST SYSTEM 205 HARDENER

According to Regulation (EC) No 1907/2006

### 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME WEST SYSTEM 205 HARDENER  
 PRODUCT NO. 205  
 SUPPLIER Wessex Resins & Adhesives Limited  
 Cupernham House  
 Cupernham Lane  
 Romsey  
 Hampshire  
 S051 7LF  
 Tel+44(0)1794 521111  
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 info@wessex-resins.com  
 EMERGENCY TELEPHONE +44 (0)1794 521111 (08:30 - 16:30, Mon - Fri)

### 2 HAZARDS IDENTIFICATION

Toxic by inhalation, in contact with skin and if swallowed. Causes burns. May cause sensitisation by skin contact. Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Possible risk of irreversible effects.

CLASSIFICATION T;R23/24/25. Xn;R48/20/21/22. Mut 3;R68. C;R34. R43. R52/53.

### 3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification
FORMALDEHYDE POLYMER WITH PHENOL & TETA		32610-77-8	30-60%	Xn;R21/22. C;R34. R43,R52/53.
TETRAETHYLENEPENTAMINE	203-986-2	112-57-2	10-30%	C;R34 Xn;R21/22 R43 N;R51/53
TRIETHYLENETETRAMINE	203-950-6	112-24-3	10-30%	C;R34 Xn;R21 R43 R52/53
PHENOL	203-632-7	108-95-2	10-30%	Muta. Cat. 3;R68 T;R23/24/25 C;R34 Xn;R48/20/21/22

The Full Text for all R-Phrases are Displayed in Section 16

### 4 FIRST-AID MEASURES

#### INHALATION

Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

#### INGESTION

Do not induce vomiting. Immediately rinse mouth and drink plenty of water (200-300 ml). Get medical attention.

#### SKIN CONTACT

Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation persists after washing.

#### EYE CONTACT

Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.

### 5 FIRE-FIGHTING MEASURES

#### EXTINGUISHING MEDIA

Carbon dioxide (CO2). Dry chemicals, sand, dolomite etc. Foam. DO NOT use water if avoidable.

#### SPECIAL FIRE FIGHTING PROCEDURES

Move container from fire area if it can be done without risk. Water spray should be used to cool containers. Cool containers exposed to flames with water until well after the fire is out. Keep run-off water out of sewers and water sources. Dike for water control.

#### SPECIFIC HAZARDS

In case of fire, toxic and corrosive gases may be formed. Fire creates: Carbon monoxide (CO). Carbon dioxide (CO2). Oxides of Nitrogen.

#### PROTECTIVE MEASURES IN FIRE

Use protective equipment appropriate for surrounding materials. Self contained breathing apparatus and full protective clothing must be worn in case of fire.

## WEST SYSTEM 205 HARDENER

### 6 ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS**

Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation. In case of spills, beware of slippery floors and surfaces.

**ENVIRONMENTAL PRECAUTIONS**

Avoid release to the environment. Do not discharge into drains, water courses or onto the ground. Contain spillages with sand, earth or any suitable adsorbent material. The product should not be dumped in nature but collected and delivered according to agreement with the local authorities.

**SPILL CLEAN UP METHODS**

Wear necessary protective equipment. Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Runoff or release to sewer, waterway or ground is forbidden. Flush area clean with lots of water. Be aware of potential for surfaces to become slippery.

### 7 HANDLING AND STORAGE

**USAGE PRECAUTIONS**

Avoid spilling, skin and eye contact. Keep away from heat, sparks and open flame. Do not eat, drink or smoke when using the product. Avoid inhalation of vapours.

**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, including direct sunrays. Store separated from: Acids. Alkalies. Oxidising material.

**STORAGE CLASS**

Chemical storage.

### 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Name	Std	TWA - 8 hrs	STEL - 15 min	Notes
PHENOL	WEL	2 ppm(Sk)		

WEL = Workplace Exposure Limit.

**PROTECTIVE EQUIPMENT**



**PROCESS CONDITIONS**

Provide eyewash station.

**ENGINEERING MEASURES**

All handling to take place in well-ventilated area.

**RESPIRATORY EQUIPMENT**

If ventilation is insufficient, suitable respiratory protection must be provided.

**HAND PROTECTION**

Use protective gloves. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

**EYE PROTECTION**

Wear splash-proof eye goggles to prevent any possibility of eye contact.

**HYGIENE MEASURES**

Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap & water if skin becomes contaminated. When using do not eat, drink or smoke.

**SKIN PROTECTION**

Wear apron or protective clothing in case of splashes.

### 9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Clear liquid
COLOUR	Light (or pale) Amber

**WEST SYSTEM 205 HARDENER**

ODOUR	Amine.		
SOLUBILITY	Slightly soluble in water.		
RELATIVE DENSITY	1.05 20	VISCOSITY	450 mPas 25
FLASH POINT (°C)	> 100 CC (Closed cup).		

**10 STABILITY AND REACTIVITY**

**STABILITY**

Stable under normal temperature conditions and recommended use.

**CONDITIONS TO AVOID**

Avoid heat, flames and other sources of ignition.

**MATERIALS TO AVOID**

Strong acids. Strong alkalis. Strong oxidising substances.

**HAZARDOUS DECOMPOSITION PRODUCTS**

Fire or high temperatures may form toxic and corrosive vapours. Fire creates: Carbon monoxide (CO). Carbon dioxide (CO2). Oxides of Nitrogen.

**11 TOXICOLOGICAL INFORMATION**

**INHALATION**

Not relevant at normal room temperatures. When heated, irritating vapours may be formed.

**INGESTION**

Toxic if swallowed. Causes burns. May cause severe internal injury.

**SKIN CONTACT**

Toxic in contact with skin. May cause sensitisation by skin contact. Causes burns. May cause skin irritation/eczema

**EYE CONTACT**

May cause chemical eye burns.

**ROUTE OF ENTRY**

Skin and/or eye contact. Ingestion.

**TARGET ORGANS**

Skin. Eyes. Gastro-intestinal tract.

**MEDICAL SYMPTOMS**

Upper respiratory irritation. Skin irritation. Skin contact may cause: Allergic rash. Eye contact may cause: Extreme irritation of eyes and mucous membranes, including burning and tearing. May cause discomfort if swallowed.

**MEDICAL CONSIDERATIONS**

Skin disorders and allergies. Persons with rash are directed to skin expert for examination of allergic eczema. Splash in eye requires examination by eye specialist.

**12 ECOLOGICAL INFORMATION**

**ECOTOXICITY**

The product contains a substance which is toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

**BIOACCUMULATION**

No data available on bioaccumulation.

**DEGRADABILITY**

No data available.

**13 DISPOSAL CONSIDERATIONS**

**DISPOSAL METHODS**

Do not allow runoff to sewer, waterway or ground. Dispose of waste and residues in accordance with local authority requirements.

**14 TRANSPORT INFORMATION**



**WEST SYSTEM 205 HARDENER**



UK ROAD CLASS	8		
PROPER SHIPPING NAME	CORROSIVE LIQUID, TOXIC, N.O.S. (FORMALDEHYDE POLYMER WITH PHENOL & TETA, PHENOL)		
UN NO. ROAD	2922	UK ROAD PACK GR.	II
ADR CLASS NO.	8	ADR CLASS	Class 8: Corrosive substances.
ADR PACK GROUP	II	HAZARD No. (ADR)	86
ADR LABEL NO.	8 & 6.1	HAZCHEM CODE	2X
CEPIC TEC(R) NO.	80GCT1-II+III	RID CLASS NO.	8
RID PACK GROUP	II	UN NO. SEA	2922
IMDG CLASS	8	IMDG PACK GR.	II
EMS	F-A, S-B	MFAG	See Guide
MARINE POLLUTANT	No.	UN NO. AIR	2922
AIR CLASS	8	AIR SUB CLASS	6.1
AIR PACK GR.	II		

**15 REGULATORY INFORMATION**

**LABELLING**



Toxic



Corrosive

**CONTAINS** FORMALDEHYDE POLYMER WITH PHENOL & TETA  
 TETRAETHYLENEPENTAMINE  
 TRIETHYLENETETRAMINE  
 PHENOL

**RISK PHRASES**

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.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R68	Possible risk of irreversible effects.

**SAFETY PHRASES**

S1/2	Keep locked up and out of the reach of children.
S24/25	Avoid contact with skin and eyes.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
S45	In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).
S46	If swallowed, seek medical advice immediately and show this container or label.
S63	In case of accident by inhalation: remove casualty to fresh air and keep at rest.
S60	This material and its container must be disposed of as hazardous waste.

**UK REGULATORY REFERENCES**

Health and Safety at Work Act 1974.

## WEST SYSTEM 205 HARDENER

### EU DIRECTIVES

System of specific information relating to Dangerous Preparations. 2001/58/EC. Dangerous Substance Directive 67/548/EEC. 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), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

### STATUTORY INSTRUMENTS

Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 (SI 1689)

### APPROVED CODE OF PRACTICE

Control of Substances Hazardous to Health Regulations 2002.

### GUIDANCE NOTES

Workplace Exposure Limits EH40.

## 16 OTHER INFORMATION

REVISION DATE 26.01.09

SDS NO. 10558

### SAFETY DATA SHEET STATUS

Approved.

### RISK PHRASES IN FULL

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.

### DISCLAIMER

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