SAFETY DATA SHEET
WEST SYSTEM 206 HARDENER

According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended.

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

1.1. Product identifier

Product name WEST SYSTEM 206 HARDENER

Product number 206

UFI UFI: DR80-Y030-300G-HEFM

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
Wessex Resins & Adhesives
Cupernham House
Cupernham Lane
Romsey
Hampshire
S051 7LF
Tel: +44(0)1794 521111
Fax: +44(0)1794 521271
info@wessex-resins.com

EU IMPORTER Wessex Resins and Adhesives Limited, First Floor, 43-40 Sir John Rogerson's Quay, Dublin 2, Dublin, Ireland Tel: +353 15256758

1.4. Emergency telephone number

Emergency telephone +44(0)207 858 1228

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (SI 2019 No. 720)

Physical hazards Not Classified

Health hazards Acute Tox. 4 - H332 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317

Environmental hazards Aquatic Chronic 3 - H412

Human health Corrosive to skin and eyes. The product contains a sensitising substance. 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

WEST SYSTEM 206 HARDENER

Hazard pictograms

Signal word	Danger
Hazard statements	H332 Harmful if inhaled. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H412 Harmful to aquatic life with long lasting effects.
Precautionary statements	P102 Keep out of reach of children. P261 Avoid breathing vapour/ spray. 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 or 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	Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia, tetraethylenepentamine, Diethylenetriamine, Triethylenetetramine
Supplementary precautionary statements	P273 Avoid release to the environment.

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

Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia **30-60%**

CAS number: 9046-10-0 EC number: 618-561-0

Classification
Skin Corr. 1C - H314
Eye Dam. 1 - H318
Aquatic Chronic 3 - H412

tetraethylenepentamine **10-30%**

CAS number: 112-57-2 EC number: 203-986-2

Classification
Acute Tox. 4 - H302
Acute Tox. 4 - H312
Skin Corr. 1B - H314
Eye Dam. 1 - H318
Skin Sens. 1 - H317
Aquatic Chronic 2 - H411

WEST SYSTEM 206 HARDENER

Triethylenetetramine, propoxylated	**5-10%**
CAS number: 26950-63-0	EC number: 500-055-5

Classification
Eye Irrit. 2 - H319

Diethylenetriamine	**5-10%**
CAS number: 111-40-0	EC number: 203-865-4

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

Triethylenetetramine	**<1%**
CAS number: 112-24-3	EC number: 203-950-6

Classification
Acute Tox. 4 - H312
Skin Corr. 1B - H314
Eye Dam. 1 - H318
Skin Sens. 1 - H317
Aquatic Chronic 3 - H412

The full text for all hazard statements is 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 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. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. 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.

Ingestion Rinse mouth thoroughly with water. Remove any dentures. 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 unless under the direction of medical personnel. 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. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. 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. Chemical burns must be treated by a physician.

WEST SYSTEM 206 HARDENER

Eye contact Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 10 minutes.

Protection of first aiders First aid personnel should wear appropriate protective equipment during any rescue. If it is suspected that volatile contaminants are still present around the affected person, first aid personnel should wear an appropriate respirator or self-contained breathing apparatus. 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.

Inhalation A single exposure may cause the following adverse effects: Severe irritation of nose and throat. Symptoms following overexposure may include the following: Corrosive to the respiratory tract.

Ingestion May cause sensitisation or allergic reactions in sensitive individuals. May cause chemical burns in mouth, oesophagus and stomach. Symptoms following overexposure may include the following: Severe stomach pain. Nausea, vomiting.

Skin contact May cause skin sensitisation or allergic reactions in sensitive individuals. 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.

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

Notes for the doctor Treat symptomatically. May cause sensitisation or allergic reactions in sensitive individuals.

SECTION 5: Firefighting measures

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 Containers can burst violently or explode when heated, due to excessive pressure build-up. This product is toxic. Severe corrosive hazard. Water used for fire extinguishing, which has been in contact with the product, may be corrosive.

Hazardous combustion products Thermal decomposition or combustion products may include the following substances: Very toxic or corrosive gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting Avoid breathing fire gases or vapours. Evacuate area. Keep upwind to avoid inhalation of gases, vapours, fumes and smoke. Ventilate closed spaces before entering them. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak. Avoid discharge to the aquatic environment. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

WEST SYSTEM 206 HARDENER

Special protective equipment for firefighters Regular protection may not be safe. Wear chemical protective suit. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

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. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage. Ensure procedures and training for emergency decontamination and disposal are in place. Do not touch or walk into spilled material. Avoid inhalation of vapours and spray/mists. Use suitable respiratory protection if ventilation is inadequate. Avoid contact with skin and eyes. Avoid contact with contaminated tools and objects.

6.2. Environmental precautions

Environmental precautions Avoid discharge into drains or watercourses or onto the ground. Avoid discharge to the aquatic environment. Large Spillages: Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

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. Provide adequate ventilation. Approach the spillage from upwind. Small Spillages: Absorb spillage with non-combustible, absorbent material. Large Spillages: If leakage cannot be stopped, evacuate area. Flush spilled material into an effluent treatment plant, or proceed as follows. Contain and absorb spillage with sand, earth or other non-combustible material. Place waste in labelled, sealed containers. Clean contaminated objects and areas thoroughly, observing environmental regulations. The contaminated absorbent may pose the same hazard as the spilled material. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dangerous for the environment. Do not empty into drains. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

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.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Keep out of the reach of children. Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimise spills. Keep container tightly sealed when not in use. Avoid the formation of mists. This product is corrosive. Immediate first aid is imperative. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers.

Advice on general occupational hygiene Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.

WEST SYSTEM 206 HARDENER

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store away from incompatible materials (see Section 10). Store in accordance with local regulations. Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage. Bund storage facilities to prevent soil and water pollution in the event of spillage. The storage area floor should be leak-tight, jointless and not absorbent.

Storage class Corrosive storage.

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

Diethylenetriamine

Long-term exposure limit (8-hour TWA): WEL 1 ppm 4.3 mg/m³

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 that provides appropriate eye and face protection should be worn.

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/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, wear gloves that are proven to be impervious to the chemical and resist degradation. 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. Wear protective gauntlets made of the following material: Nitrile rubber. Thickness: ≥ 0.13 mm The selected gloves should have a breakthrough time of at least 0.5 hours.

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.

WEST SYSTEM 206 HARDENER

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 'UKCA'-marked. Check that the respirator fits tightly and the filter is changed regularly. Combination filter, type A2/P2.
Environmental exposure controls	Keep container tightly sealed when not in use. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

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 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	1.01 @ 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	125 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.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Stable under the prescribed storage conditions.

10.2. Chemical stability

WEST SYSTEM 206 HARDENER

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None known.

10.4. Conditions to avoid

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

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.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD_{50}) Based on available data the classification criteria are not met.

ATE oral (mg/kg) 2,311.18

Acute toxicity - dermal

Notes (dermal LD_{50}) Based on available data the classification criteria are not met.

ATE dermal (mg/kg) 4,346.7

Acute toxicity - inhalation

Notes (inhalation LC_{50}) Acute Tox. 4 - H332 Harmful if inhaled.

ATE inhalation (dusts/mists mg/l) 4.93

Skin corrosion/irritation

Animal data Skin Corr. 1B - H314 Causes severe burns.

Serious eye damage/irritation

Serious eye damage/irritation Eye Dam. 1 - H318 Corrosive to skin. Corrosivity to eyes is assumed.

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation May cause skin sensitisation or allergic reactions in sensitive individuals.

Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met.

Genotoxicity - in vivo Based on available data the classification criteria are not met.

Carcinogenicity

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

IARC carcinogenicity None of the ingredients are listed or exempt.

Reproductive toxicity

WEST SYSTEM 206 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	Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazard	Based on available data the classification criteria are not met.

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Corrosive to the respiratory tract. Symptoms following overexposure may include the following: Severe irritation of nose and throat.
Ingestion	May cause sensitisation or allergic reactions in sensitive individuals. May cause chemical burns in mouth, oesophagus and stomach. Symptoms following overexposure may include the following: Severe stomach pain. Nausea, vomiting.
Skin contact	May cause skin sensitisation or allergic reactions in sensitive individuals. 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.
Route of exposure	Ingestion Inhalation Skin and/or eye contact
Target organs	No specific target organs known.
Medical considerations	Skin disorders and allergies.

Toxicological information on ingredients.

Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	2,885.3
Species	Rat
Notes (oral LD_{50})	REACH dossier information.
ATE oral (mg/kg)	2,885.3

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	2,979.7
Species	Rabbit
Notes (dermal LD_{50})	REACH dossier information.
ATE dermal (mg/kg)	2,979.7

Skin corrosion/irritation

WEST SYSTEM 206 HARDENER

Animal data	Dose: 0.5ml, 4 hr, Rabbit Erythema/eschar score: Moderate to severe erythema (3). REACH dossier information. Corrosive to skin.

Serious eye damage/irritation

Serious eye damage/irritation	Corrosive to skin. Corrosivity to eyes is assumed. No testing is needed.

Germ cell mutagenicity

Genotoxicity - in vitro	Gene mutation: Negative. REACH dossier information.
Genotoxicity - in vivo	Chromosome aberration: Negative. REACH dossier information.

Reproductive toxicity

Reproductive toxicity - fertility	Screening: - NOAEL 30 mg/kg/day, Dermal, Rat P REACH dossier information.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	NOAEL 250 mg/kg, Oral, Rat REACH dossier information.

tetraethylenepentamine

Toxicological effects	No information available.

Acute toxicity - oral

ATE oral (mg/kg)	500.0

Acute toxicity - dermal

ATE dermal (mg/kg)	1,100.0

Triethylenetetramine, propoxylated

Toxicological effects	No information available.

Diethylenetriamine

Acute toxicity - oral

Notes (oral LD_{50})	REACH dossier information. Harmful if swallowed.
ATE oral (mg/kg)	500.0

Acute toxicity - dermal

Notes (dermal LD_{50})	REACH dossier information. Harmful in contact with skin.
ATE dermal (mg/kg)	1,100.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} dust/mist mg/l)	0.25
Notes (inhalation LC_{50})	Data lacking.
ATE inhalation (dusts/mists mg/l)	0.25

Skin corrosion/irritation

Animal data	Corrosive to skin.

Serious eye damage/irritation

WEST SYSTEM 206 HARDENER

Serious eye damage/irritation	Corrosive to skin. Corrosivity to eyes is assumed. No testing is needed.

Respiratory sensitisation

Respiratory sensitisation	Mouse: Not sensitising. REACH dossier information. Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation	Guinea pig maximization test (GPMT) - Guinea pig: Sensitising. REACH dossier information. May cause sensitisation by skin contact.

Germ cell mutagenicity

Genotoxicity - in vitro	Gene mutation: Negative. REACH dossier information. Based on available data the classification criteria are not met.
Genotoxicity - in vivo	Gene mutation: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity	NOAEL > 56.3 mg/kg, Dermal, Mouse Estimated value. REACH dossier information. There is no evidence that the product can cause cancer.

Reproductive toxicity

Reproductive toxicity - fertility	One-generation study - NOAEL 100 mg/kg/day, Oral, Rat P REACH dossier information. Based on available data the classification criteria are not met.
Reproductive toxicity - development	Developmental toxicity: - NOAEL: 30 mg/kg/day, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	NOAEL 70 mg/kg, Oral, Rat REACH dossier information. Not classified as a specific target organ toxicant after repeated exposure.

Triethylenetetramine

Toxicological effects	No information available.

Acute toxicity - dermal

ATE dermal (mg/kg)	1,100.0

SECTION 12: Ecological information

Ecotoxicity Dangerous for the environment if discharged into watercourses.

12.1. Toxicity

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

Ecological information on ingredients.

Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia

Acute aquatic toxicity

Acute toxicity - fish	LC50, 96 hours: > 15 mg/l, Oncorhynchus mykiss (Rainbow trout) REACH dossier information.
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 80 mg/l, Daphnia magna REACH dossier information.

WEST SYSTEM 206 HARDENER

Acute toxicity - aquatic plants	EC_{50}, 72 hours: 15 mg/l, Freshwater algae REACH dossier information.
Acute toxicity - microorganisms	EC_{50}, 3 hours: 750 mg/l, Activated sludge REACH dossier information.

tetraethylenepentamine

Toxicity	There are no data on the ecotoxicity of this product.

Triethylenetetramine, propoxylated

Toxicity	There are no data on the ecotoxicity of this product.

Diethylenetriamine

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: 430 mg/l, Poecilia reticulata (Guppy) REACH dossier information.
Acute toxicity - aquatic plants	EC_{50}, 72 hours: 1164 mg/l, Selenastrum capricornutum REACH dossier information.
Acute toxicity - microorganisms	EC_{50}, 3 hours: 32.7 mg/l, Activated sludge REACH dossier information.

Triethylenetetramine

Toxicity	There are no data on the ecotoxicity of this product.

12.2. Persistence and degradability

Persistence and degradability The degradability of the product is not known.

Ecological information on ingredients.

Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia

Stability (hydrolysis)	pH7 - Half-life : 1 year @ 25°C REACH dossier information.
Biodegradation	Water - Degradation (%) 0: 28 days REACH dossier information. No biodegradation observed under test conditions.

tetraethylenepentamine

Persistence and degradability	There are no data on the degradability of this product.

Triethylenetetramine, propoxylated

Persistence and degradability	There are no data on the degradability of this product.

Diethylenetriamine

WEST SYSTEM 206 HARDENER

Phototransformation Water - DT_{50} : 2.6 hours
Estimated value.
REACH dossier information.

Biodegradation Water - Degradation (%) 87: 21 days
REACH dossier information.
The substance is readily biodegradable.

Triethylenetetramine

Persistence and degradability There are no data on the degradability of this product.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not determined.

Ecological information on ingredients.

Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia

Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient log Pow: 1.34 REACH dossier information.

tetraethylenepentamine

Bioaccumulative potential No data available on bioaccumulation.

Triethylenetetramine, propoxylated

Bioaccumulative potential No data available on bioaccumulation.

Diethylenetriamine

Bioaccumulative potential The product is not bioaccumulating. BCF: < 1.7, Cyprinus carpio (Common carp)
REACH dossier information.

Partition coefficient log Pow: -5.58 Estimated value. REACH dossier information.

Triethylenetetramine

Bioaccumulative potential No data available on bioaccumulation.

12.4. Mobility in soil

Mobility No data available.

Ecological information on ingredients.

Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia

Mobility The product contains volatile organic compounds (VOCs) which have a photochemical ozone creation potential.

tetraethylenepentamine

Mobility No information available.

WEST SYSTEM 206 HARDENER

Triethylenetetramine, propoxylated

Mobility No information available.

Diethylenetriamine

Mobility The product is soluble in water.

Adsorption/desorption coefficient Water - log Koc: < 4.6 @ 25°C REACH dossier information.

Triethylenetetramine

Mobility No information available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients.

Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current UK criteria.

tetraethylenepentamine

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current UK criteria.

Triethylenetetramine, propoxylated

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current UK criteria.

Diethylenetriamine

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current UK criteria.

Triethylenetetramine

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current UK criteria.

12.6. Other adverse effects

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

WEST SYSTEM 206 HARDENER

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.
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. (CONTAINS Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia, tetraethylenepentamine)
Proper shipping name (IMDG)	AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia, tetraethylenepentamine)
Proper shipping name (ICAO)	AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia, tetraethylenepentamine)
Proper shipping name (ADN)	AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia, tetraethylenepentamine)

14.3. Transport hazard class(es)

ADR/RID class	8
ADR/RID classification code	C7
ADR/RID label	8
IMDG class	8
ICAO class/division	8
ADN class	8

Transport labels

14.4. Packing group

ADR/RID packing group	II
IMDG packing group	II

WEST SYSTEM 206 HARDENER

ICAO packing group	II
ADN packing group	II

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

IMDG Code segregation group	18. Alkalis
EmS	F-A, S-B
ADR transport category	2
Emergency Action Code	2X
Hazard Identification Number (ADR/RID)	80
Tunnel restriction code	(E)

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

Transport in bulk according to Annex II of MARPOL 73/78 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 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.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
IATA: International Air Transport Association.
ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.
IMDG: International Maritime Dangerous Goods.
CAS: Chemical Abstracts Service.
ATE: Acute Toxicity Estimate.
LC50: Lethal Concentration to 50 % of a test population.
LD50: Lethal Dose to 50% of a test population (Median Lethal Dose).
EC_{50}: 50% of maximal Effective Concentration.
PBT: Persistent, Bioaccumulative and Toxic substance.
vPvB: Very Persistent and Very Bioaccumulative.

WEST SYSTEM 206 HARDENER

Classification abbreviations and acronyms	Acute Tox. = Acute toxicity Eye Dam. = Serious eye damage Skin Corr. = Skin corrosion Skin Sens. = Skin sensitisation Aquatic Chronic = Hazardous to the aquatic environment (chronic)
Key literature references and sources for data	Source: European Chemicals Agency, http://echa.europa.eu/
Classification procedures according to SI 2019 No. 720	Acute Tox. 4 - H332: Eye Dam. 1 - H318: Skin Corr. 1B - H314: Skin Sens. 1 - H317: : Calculation method. Aquatic Chronic 3 - H412: : Calculation method.
Training advice	Read and follow manufacturer's recommendations. Only trained personnel should use this material.
Revision date	30/05/2022
Revision	14
Supersedes date	11/04/2022
SDS number	10569
Hazard statements in full	H302 Harmful if swallowed. 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. H319 Causes serious eye irritation. H332 Harmful if inhaled. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.