

SAFETY DATA SHEET

CODE: H205

ISSUE DATE: 03/10/2024 REVISION: 1.1



adhesivetech

**WEST
SYSTEM®**

1.0 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE SUPPLIER

Product Name:	WEST SYSTEM® 205 Fast Hardener
Product Code:	H205
Recommended use:	An epoxy hardener used for curing epoxy resin systems. Used for construction of fibre reinforced equipment and fittings. Suitable for construction of recreational water craft. Corrosion resistant flooring and coatings.
Supplier:	Adhesive Technologies NZ Limited
Street Address:	17 Corban Avenue, Henderson, Auckland
Telephone Number:	0064 9 838 6961 (8.00am to 5.00pm, Monday to Friday)
Facsimile:	0064 9 836 4849
Web Address	http://www.adhesivetechnologies.co.nz/
Emergency Telephone:	0064 3 479 7248 (From overseas)
National Poison Information Centre	0800 POISON (764 766) (within New Zealand)
New Zealand Fire Service	111
Date of issue	03/10/2024
Version	1.1

The information provided in this safety data sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in text.

CODE: H205

ISSUE DATE: 03/10/2024 **REVISION:** 1.1

2.0 HAZARDS IDENTIFICATION

Hazard Classification

Acute Toxicity (Oral):	Category 4
Acute Toxicity (Dermal):	Category 4
Skin Corrosion/Irritation:	Category 1B
Skin Sensitisation:	Category 1
Germ Cell Mutagenicity:	Category 2
Specific Target Organ Toxicity (Repeat):	Category 2
Aquatic Toxicity:	Category 3

For the full text of the H-Statements mentioned in this Section, see Section 16.



Signal Word: DANGER

The information provided in this safety data sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in text.

CODE: H205

ISSUE DATE: 03/10/2024 **REVISION:** 1.1

Precautionary Statements

Hazards Statement

- | | |
|-------------|---|
| H302 | Harmful if swallowed. |
| H311 | Toxic in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H317 | May cause an allergic skin reaction. |
| H360 | May damage fertility of the unborn child. |

Prevention

- | | |
|-------------|--|
| P264 | Wash hands thoroughly after handling. |
| P270 | Do not eat, drink, or smoke when using this product. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P272 | Contaminated work clothing should not be allowed out of the workplace. |
| P203 | Obtain, read, and follow all safety instructions before use. |
| P273 | Avoid release to the environment. |

The information provided in this safety data sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in text.

SAFETY DATA SHEET

CODE: H205

ISSUE DATE: 03/10/2024 **REVISION:** 1.1

Response

P301+P317	IF SWALLOWED: Get medical help.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do not induce vomiting.
P302+361+P354	IF ON SKIN: Take off immediately all contaminated clothing. Immediately rinse with water for several minutes.
P305+P354+P338	IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302+352	IF ON SKIN: wash with plenty of water.
P333+317	IF SKIN irritation or rash occurs: Get medical help.
P362+P364	Take off contaminated clothing and wash it before reuse.
P304+340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P316	Get emergency medical help immediately.
P318	If exposed or concerned, get medical advice.
P319	Get medical help if you feel unwell.

Storage

P405 Store locked up

Disposal

P501 Dispose of contents/ container to an approved waste disposal plant.
Restricted to professional users.

Other hazards

The information provided in this safety data sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in text.

SAFETY DATA SHEET

CODE: H205

ISSUE DATE: 03/10/2024 REVISION: 1.1

3.0 COMPOSITION / INFORMATION ON INGREDIENTS

Substance / Mixture: Mixture

Hazardous Ingredients:

Chemical Name	CAS No.	Concentration (%)
Phenol	108-95-2	40-50
Triethylenetetramine	112-24-3	0-10
Tetraethylenepentamine	112-57-2	10-20
Other non-hazardous components		to 100

4.0 FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre Phone 0800 764 766.

First-aid measures general:

Never give anything by mouth to an unconscious person. Suspected of causing cancer.

IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation:

Allow victim to breathe fresh air. Allow the victim to rest. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

First-aid measures after skin contact:

Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: wash thoroughly for five minutes. seek medical attention. Get medical advice/attention. Specific treatment (see seek medical attention. on this label).

First-aid measures after eye contact:

The information provided in this safety data sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in text.

SAFETY DATA SHEET

CODE: H205

ISSUE DATE: 03/10/2024 **REVISION:** 1.1

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

First-aid measures after ingestion:

Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

Symptoms/injuries:

May cause genetic defects. Suspected of damaging fertility or the unborn child. Causes damage to organs.

Symptoms/injuries after inhalation:

Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled.

Symptoms/injuries after skin contact:

Causes skin irritation.

Symptoms/injuries after eye contact:

Causes serious eye irritation.

5.0 FIRE FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media: Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media: Do not use a heavy water stream.

Special hazards arising from the substance or mixture

Fire hazard: Flammable liquid and vapor. Highly flammable liquid and vapor.

Explosion hazard: May form flammable/explosive vapor-air mixture.

Reactivity: No reactivity hazard other than the effects described in sub-sections below.

Advice for firefighters

The information provided in this safety data sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in text.

SAFETY DATA SHEET

CODE: H205

ISSUE DATE: 03/10/2024 **REVISION:** 1.1

Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

6.0 ACCIDENTAL RELEASE MEASURES

General Precautions: Isolate area. Keep unnecessary and unprotected personnel from entering the area. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection. Refer to Section 7, Handling, for additional precautionary measures.

Personal Precautions: Use cautious judgement when cleaning up spills. Shut off leaks, if possible, without personal risk.

Environ-mental Precautions: Dike and contain. Contain run-off and dispose of properly. Remove contaminated soil to remove contaminated trace residues. Prevent from entering drains, ditches, or rivers.

Clean-up Methods (small): Soak up with an absorbent material such as clay, sand, sawdust or Zorball. Place in non-leaking container. Seal tightly for proper disposal.

The information provided in this safety data sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in text.

SAFETY DATA SHEET

CODE: H205

ISSUE DATE: 03/10/2024 **REVISION:** 1.1

For Large Spills:

Remove with vacuum trucks or pump to storage/salvage vessels. Soak up residue with an absorbent material such as clay, sand, sawdust or Zorball. Place in non-leaking container. Seal tightly for proper disposal. Flush is with water to remove trace residue.

7.0 HANDLING & STORAGE

Workplace Exposure Standards: Not established

Engineering control measures: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants as low as possible and/or below any recommended or statutory limits. Use explosion-proof ventilation equipment.

Personal protective equipment: **Respiratory** - Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

Skin - Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Eye - Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases, or dusts.

Hand - Recommended: polyvinyl alcohol (PVA), Butyl rubber, EVAL, Neoprene

The information provided in this safety data sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in text.

SAFETY DATA SHEET

CODE: H205

ISSUE DATE: 03/10/2024 REVISION: 1.1

8.0 EXPOSURE CONTROLS / PERSONAL PROTECTION

Workplace Exposure Standards	Component	List	Type	Value
	Triethylenetetramine	WEEL	TWA	6 mg/m ³ 1 ppm SKIN
Engineering controls	Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants as low as possible and/or below any recommended or statutory limits. Use explosion-proof ventilation equipment.			
Personal Protection	Respiratory - Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.			

Skin - Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Eye - Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Hand - Recommended: polyvinyl alcohol (PVA), Butyl rubber, EVAL, Neoprene.

The information provided in this safety data sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in text.

SAFETY DATA SHEET

CODE: H205

ISSUE DATE: 03/10/2024 REVISION: 1.1

9.0 PHYSICAL & CHEMICAL PROPERTIES

Appearance	Liquid
Colour	Amber
Odour	Sweet odour
pH	Not available
Vapour pressure	< 0.01 kPa @ 20 °C
Vapour density	5.0 @ 20 °C (air = 1)
Boiling Point	Not available
Melting/Freezing Point	Not available
Solubility (water)	Soluble
Specific Gravity/Density	1.06g/cm ³ [25°C (77°F)]
Flash Point	148°C (closed cup)
Flammable Limits	LFL: Not available UFL: Not available
Auto-ignition	294°C

10.0 STABILITY & REACTIVITY

Stability:	Stable under recommended storage conditions.
Conditions to avoid:	Avoid temperatures above 300°C. Potentially violent decomposition can occur, causing gas generation and pressure increases in closed systems.
Incompatible materials:	Heat is generated when mixed with water. Spattering and boiling can occur. Avoid contact with oxidizing materials. Avoid contact with: Acids. Acrylates. Alcohols. Aldehydes. Halogenated hydrocarbons. Ketones. Nitrites. Avoid contact with metals such as: Brass. Bronze. Copper. Copper alloys. Avoid contact with absorbent materials such as: Ground corn cobs. Moist organic absorbents. Peat moss. Sawdust.

The information provided in this safety data sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in text.

SAFETY DATA SHEET

CODE: H205

ISSUE DATE: 03/10/2024 **REVISION:** 1.1

Hazardous Decomposition

Products:

Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Ammonia. Ethylenediamine. Volatile amines.

11.0 TOXICOLOGICAL INFORMATION

Potential Health effects

No data is available on the product itself.

No data is available on the product itself.

Moderate skin irritation

Severe eye irritation.

Acute Health Effects

(Triethylenetetramine)

Test	Species	Result	Exposure
LD50 Oral	Rat	2,500 - 4,340 mg/kg	-
LD50 Dermal	Rat	550 - 805 mg/kg	-

Systemic Effects

Except for Skin sensitization, repeated exposure is not likely to cause significant adverse effects.

Carcinogenicity

No data is available on the product itself.

Mutagenicity

No data is available on the product itself.

The information provided in this safety data sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in text.

12.0 ECOLOGICAL INFORMATION

(Triethylenetetramine)

Ecotoxicity Material is toxic to aquatic organisms on an acute basis

	Species	Period	Result
LC50	guppy	96 h	570mg/l
LC50	water flea	48 h	12-40 mg/
EC50	green algae	72 h	3.7 mg/l

Degradability Under OECD guidelines this material cannot be considered as readily degradable.

Bioaccumulation Moderate
Log P_{ow} = -2.65 6at 23 °C

HSNO **9.1B** (algal) Very ecotoxic in the aquatic environment
Classification **9.1C** (crustacean) Harmful in the aquatic environment
9.3B Ecotoxic to terrestrial vertebrates

13.0 DISPOSAL CONSIDERATIONS

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal methods must follow all Federal, State/Provincial, and local laws and regulations.

FOR UNUSED AND UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: recycler, reclaimer, incinerator, or other destruction device.

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.

The information provided in this safety data sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in text.

SAFETY DATA SHEET

CODE: H205

ISSUE DATE: 03/10/2024 **REVISION:** 1.1

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.

14.0 TRANSPORTATION & REGULATORY INFORMATION

Road, Rail, Sea, and Air Transport

UN Number	2735
Proper Shipping name	Polyamines, liquid, corrosive, n.o.s. (mixture contains Triethylenetetramine)
DG Class	8
Packing Group	III
IMO/IMDG class	8
ICAO/IATA class	8
HAZCHEM code	2X
EmS	F-A,S-B
Marine pollutant	Yes

The information provided in this safety data sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in text.

SAFETY DATA SHEET

CODE: H205

ISSUE DATE: 03/10/2024 **REVISION:** 1.1

15.0 REGULATORY INFORMATION

EPA Approval: The HSNO Approval Number for this Group Standard is HSR002658.
Group Standard: Surface Coatings and Colourants (Corrosive) Group Standard 2020

16.0 OTHER INFORMATION

References

<https://echa.europa.eu/information-on-chemicals/cl-inventory-databas>

<https://www.epa.govt.nz/database-search/chemical-classification-and-information-database-ccid/>

<https://www.epa.govt.nz/>

RCNZ Approved HSNO CoP Preparation of Safety Data Sheets

https://www.epa.govt.nz/assets/Uploads/Documents/Hazardous-Substances/GHS2/Guide_to_Classifying_Hazardous_Substances_in_NZ.pdf

While Adhesive Technologies NZ Limited believes that the information contained herein is based on data considered accurate, no warranty or representation is expressed or implied for which Adhesive Technologies NZ Limited assumes legal responsibility.

This version replaces all previous versions.

FOR FURTHER PRODUCT INFORMATION CALL ADHESIVE TECHNOLOGIES NZ LTD DURING BUSINESS HOURS

Product Information Manager (+64) 9 838 6961

The information provided in this safety data sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in text.