ADHESIVE TECHNOLOGIES NZ LTD.

Safety Data Sheet

PRODUCT NAME: **WEST SYSTEM ® 205** **ISSUE DATE:** **24/03/2021** **REVISION:** 2.2

1. Product and Company Identification

Product Name	WEST System® 205		
Product Code	205		
Recommended uses	Construction of fibre reinforced equipment and fittings. Suitable for construction of recreational water craft. Corrosion resistant flooring and coatings.		
Company	**Adhesive Technologies NZ ltd**		
Street Address	17 Corban Avenue Henderson Auckland		
Telephone	+64 9 838 6961		
Emergency Contact numbers	**National Poisons Centre** 0800 764 766 (0800 POISON)	**Other Countries** 0064 3 479 7248	**New Zealand Fire Service**– 111

2. Hazards Identification

HSNO Classification **Signal Word: DANGER**

6.1C (dermal) Acutely toxic
6.1C (oral) Acutely toxic
6.5B (contact) Contact sensitisers
6.8B Suspected human reproductive or developmental toxicants
6.9A (oral) Toxic to human target organs or systems
6.9B (dermal) Harmful to human target organs or systems
8.2C Corrosive to dermal tissue
8.3A Corrosive to ocular tissue
9.1B (algal) Very ecotoxic in the aquatic environment
9.1C (crustacean) Harmful in the aquatic environment
9.3B Ecotoxic to terrestrial vertebrates

GHS Classification

Acute toxicity: Oral	Category 3
Acute toxicity: Skin	Category 3
Skin sensitization	Category 1
Reproductive toxicity	Category 2
Specific Target Organ Systemic Toxicity (Single Exposure	Category 1
Skin corrosion/irritation	Category 1C
Serious eye damage/eye irritation	Category 1
Aquatic toxicity (Chronic): Ecotoxic to terrestrial vertebrates	Category 2

Hazard Symbols

Hazard statements

H301 Toxic if swallowed.
H311 Toxic in contact with skin.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H361 Suspected of damaging fertility or the unborn child
H373 Causes damage to organs through prolonged or repeated exposure
H411 Toxic to aquatic life with long lasting effects.
H432 Toxic to terrestrial vertebrates.

Precautionary statements

Prevention

P202 Do not handle until all safety precautions have been read and understood.

P261 Avoid breathing vapours
P264 Wash hands 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.
P273 Avoid release to the environment
P280 Wear protective gloves, protective clothing, eye protection and face protection

Response

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
P361 Remove/Take off immediately all contaminated clothing.
P363 Wash contaminated clothing before reuse.
P391 Collect spillage.

Storage

P405 Store locked up

Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

3. Composition/Information on Ingredients

Chemical Name	CAS no.	Weight %
Teta, reaction products with phenol /formaldehyde	32610-77-8	40-50
Triethylenetetramine	112-24-3	30-40
Phenol	108-95-2	10-20
Other ingredients determined not to be hazardous		To 100

4. First Aid

Inhalation Remove victim to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing. Get medical attention.

Skin Contact Remove contaminated clothing/shoes and wipe excess from skin. Flush skin with water. Follow by washing with soap and water. If irritation occurs, get medical attention. Do not reuse clothing until cleaned. Contaminated leather articles, including shoes, cannot be decontaminated and should be destroyed to prevent reuse.

Eye contact Flush eyes with plenty of water for 15 minutes while holding eyelids open. Get medical attention.

Ingestion Do not induce vomiting. Rinse mouth with water. Give plenty of water to drink.

Treatment Treat symptomatically

5. Fire-fighting Measures

Extinguishing Media Use water fog, foam, dry chemical or carbon dioxide.

Extinguishing Media to Avoid Do not use direct water stream. May spread fire

Hazardous Combustion Products In case of fire, the following hazardous smoke fumes may be produced: Carbon Oxides, Nitrous gases, ammonia.

Fire Fighting Procedures	Clear fire area of all non-emergency personnel. Isolate fire and deny unnecessary entry. Cool fire exposed containers with water. Irritating fumes are released in fire situations. Move container from fire area if this is possible without hazard. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Do not allow material or run-off to enter waterways. Stay upwind, keep out of low areas.
Fire-fighting equipment	Wear positive-pressure self-contained breathing apparatus (SCBA) and protective firefighting clothing (includes firefighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during firefighting operations. If contact is likely, change to full chemical resistant firefighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location
HAZCHEM	2X

6. 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 into 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.
Clean-up Methods (large)	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 are with water to remove trace residue.

7. Handling and Storage

Handling	Keep out of reach of children. Put on appropriate PPE (see section 8). Causes skin irritation and sensitivity. Avoid contact with skin, eyes and clothing. Wash with soap and water before eating, drinking, smoking, applying cosmetics, or using toilet facilities. Do not breathe vapour or mist. Clean up spilled material immediately, and wash clothes, equipment and work area after use.
Storage	Store in a cool, dry place with adequate ventilation. Keep containers closed when not in use.

8. Exposure Controls / Personal Protection

Workplace Exposure Standards	**Component**	**List**	**Type**	**Value**
	Triethylenetetramine	WEEL	TWA	6 mg/m3 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.

9. Physical and 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. Stability and Reactivity

Chemical 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.

Materials to avoid 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.

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. Toxicological Information

Potential Health effects

Inhalation No data is available on the product itself.

Ingestion No data is available on the product itself.

Skin Moderate skin irritation

Eye 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.

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

13. Disposal Considerations

Disposal

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal methods must be in compliance with 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.

14. Transport 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
HAZCHEM code	2X
IMO/IMDG class	8
ICAO/IATA class	8
EMS code	F – A, S – B
Marine pollutant	Yes

15. Regulatory Information

ERMA NZ Approval code HSR002658

16. Other Information

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

Product Information Manager (+64) 9 838 6961

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