

# Material Safety Data Sheet

## H205 West System Fast Hardener

Version 1.1



### Section 1: Identification of the Material and the Supplier

Trade Name H205 West System Fast Hardener

Product Code H205

Recommended Use Used in conjunction with epoxy resin for adhesive and composite application.

Company ATL Composites

Address 12-14 Production Ave Ernest 4214

Telephone +61 7 5563 1222 (Monday-Friday 8:30am-5:00pm)

Emergency Telephone Number +61 7 5563 1222 (Monday-Friday 8:30am-5:00pm)

Revision Date 4<sup>th</sup> June 2014

### Section 2: Hazards Identification

Hazard Classification: HAZARDOUS SUBSTANCE : DANGEROUS GOODS

#### Risk Phrases

R34 Causes burns

R41 Risk of serious damage to eyes

R21/22 Harmful in contact with the skin and if swallowed

R42/43 May cause sensitization by inhalation and skin contact

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

R68 Possible risk of irreversible effects

#### Safety Phrases

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S28 After contact with skin, wash immediately with plenty of soap-suds.

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.

### Section 3: Composition / Information on Ingredients

Chemical Name	CAS No.	Weight %
Reaction Products of TETA and propylene oxide	26950-63-0	30 - 60
Tetraethylenepentamine	112-57-2	10 - <30
Triethylenetetramine	112-24-3	<10
Phenol	112-24-3	10 - <30

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### Section 4: First Aid Measures

General Advice	Seek medical advice. If breathing has stopped or is laboured give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped begin cardiopulmonary resuscitation immediately.
Inhalation	Remove the source of contamination or move the victim to fresh air. Ensure airways are clear and have qualified person give oxygen through a face mask if breathing is difficult. If symptoms develop and persist seek medical attention.
Ingestion	DO NOT INDUCE VOMITING. Immediately wash out mouth with water. If symptoms persist seek medical attention.
Skin	Wash affected area thoroughly with soap and water. Remove contaminated clothing and wash before reuse or discard. If symptoms develop seek medical attention.
Eye	If contact with the eye(s) occurs, wash with copious amounts of water holding eyelid(s) open. Take care not to rinse contaminated water into the non-affected eye. If symptoms persist seek medical attention.
First Aid Facilities	Eye wash and normal wash room facilities.
Advice to Doctor	Treat symptomatically
Other Information	For advice, contact a Poisons Information Center (Phone e.g Australia 131 126)

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### Section 5: Fire Fighting Measures

Suitable extinguishing media	Use carbon dioxide, dry chemical or foam.
Hazards from Combustion Products	Under fire conditions this product may emit toxic and/or irritating fumes including carbon monoxide and carbon dioxide.
Precautions in connection with Fire	Full protective clothing and self-contained breathing apparatus. Operated in a positive pressure mode. Water spray may be used to keep fire exposed containers cool.

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### Section 6: Accidental Release Measures

Emergency procedures	Wear appropriate personal protective equipment and clothing to minimise exposure. Extinguish or remove all sources of ignition and stop leak if safe to do so. Increase ventilation. Evacuate all unnecessary personnel. If possible contain the spill. Place inert absorbent material onto spillage. Use clean non-sparking tools to collect the material and place in a suitable labelled container. Do not dilute material but contain. Dispose of waste according to federal, Environmental Protection Authority and state regulations. If the spillage enters the waterways contact the Environmental Protection Authority, or your local Waste
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Management Authority.

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### Section 7: Handling and Storage

#### Storage

Precautions for Safe Handling

Do not get into eyes, on skin or on clothing. Use only with adequate ventilation. Avoid contact with skin, eyes and clothing. Avoid prolonged or repeated contact with skin, eyes and clothing. Wash thoroughly after handling. DANGER. Corrosive to the eyes, corrosive to the skin. Maybe harmful if swallowed. Causes respiratory tract irritation. May cause skin sensitisation.

Containers, even those that have been emptied, can contain hazardous product residues. Wash with soap and water before eating, drinking, smoking, applying cosmetics, or using toilet facilities. Launder contaminated clothing before reuse. Contaminated leather articles, including shoes cannot be decontaminated and should be destroyed to prevent reuse.

Conditions for Safe Storage

Store in a cool, dry, well-ventilated area out of direct sunlight. Keep containers closed when not in use.

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### Section 8: Exposure Controls / Personal Protection

National Exposure Standards

No exposure standards have been established for this material by the Australian National Occupational Health and Safety Commission (NOHSC) or the Occupational Safety and Health Service (OHS) of the New Zealand Department of Labour. However, exposure standards for ingredients are stated below:  
Australian National Occupational Health and Safety Commission (NOHSC) exposure standards:

Biological Limit Values

No biological limit allocated.

Engineering Controls

Provide sufficient ventilation to keep airborne levels below the exposure limit. Where vapours or mist are generated, particularly in enclosed areas, and natural ventilation is inadequate, a local exhaust ventilation system is required.

Provide readily accessible eye wash stations and safety showers.

Respiratory Protection

Where ventilation is inadequate the use of an Air Purifying Respirator with a replaceable organic vapour filter complying with AS/NZS 1715 and AS/NZS 1716 is recommended.

Eye Protection

Safety glasses with side shields, goggles or full-face shield as appropriate recommended. Final choice of appropriate eye/face protection will vary according to individual circumstances i.e. methods of handling or engineering controls and according to risk assessments undertaken. Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 – Eye protectors for Industrial Applications.

Hand Protection

Wear gloves of impervious material such as impervious PVC or rubber gloves. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments

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ATL composites

undertaken. Reference should be made to AS/NZS 2161.1 Occupational protection gloves – Selection use and maintenance.

Body Protection Suitable work wear should be worn to protect personal clothing. Industrial clothing should conform to the specifications detailed in AS/NZS 2919: Industrial Clothing.

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### Section 9: Physical and Chemical Properties

Form	Low Viscosity Liquid
Colour	Light Yellow
Odour	Amine Odour
pH	Not Available
Melting Point	Not Determined
Flash Point	>100°C
Boiling Point	232°C
Vapour Density	Not Available
Vapour Pressure	0.001 kPa @ 20°C
Density	1.00 to 1.05
Auto-Ignition Temperature	Not Available
Flammable Limits – Lower	Not Available
Flammable Limits – Upper	Not Available

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### Section 10: Stability and Reactivity

Chemical Stability	Stable under normal conditions.
Conditions to Avoid	Extremes of temperature and direct sunlight. Exposure to water vapour.
Incompatible Materials	Strong oxidising agents.
Hazardous Decomposition Products	Oxides of Nitrogen Carbon Monoxide
Hazardous Polymerisation	Reacts violently with strong oxidising agents

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### Section 11: Toxicological Information

Acute oral toxicity	LD50 Expected to be moderately toxic, $200 < LD50 \leq 2000$ mg/kg
Acute dermal toxicity	LD50 – Expected to be moderately toxic, $400 < LD50 \leq 2000$ mg/kg
Skin Contact	Causes burns, may cause sensitisation by skin contact.
Eye Contact	Risk of serious damage to eyes. Causes burns.
Ingestion	Harmful if swallowed.
Inhalation	May cause sensitization by inhalation, may give off gas, vapour or dust that is very irritating or corrosive to the respiratory system.

### Section 12: Ecological Information

Ecotoxicity	Based largely or completely on data for major component(s):, Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in most sensitive species tested)., May increase pH of aquatic systems to > pH 10 which may be toxic to aquatic organisms. Based largely or completely on data for major component(s): Bioconcentration potential is low (BCF < 100 or Log Pow < 3). Potential for mobility in soil is very high (Koc between 0 and 50).
Persistence / Degradability	Not available.
Mobility	Not available.
Environmental Protection	Do not allow product to enter drains, waterways or sewers.

### Section 13: Disposal Considerations

Disposal Considerations	Dispose of waste according to federal, EPA and state regulations.
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### Section 14: Transport Information

ADG U.N Number	UN2735
ADG Proper Shipping Name	Amine, liquid, corrosive, n.o.s. (Tetraethylenepentamine)
ADG DG Class	8
ADG Hazchem Code	2X
ADG Packing Group	III
IATA	Proper shipping name: Amine, liquid, corrosive, n.o.s. (Tetraethylenepentamine) Class : 8

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UN/ID No : UN2735  
Packing Group : III

IMDG      Proper shipping name: Amine, liquid, corrosive, n.o.s.  
(Tetraethylenepentamine)  
Class : 8  
UN/ID No : UN2735  
Packing Group : III

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### Section 15: Regulatory Information

Regulatory Information      Australia: Classified as hazardous according to criteria of National Occupational Health and Safety Commission (NOHSC).

Poisons Schedule      5

Hazard Category      Toxic, Corrosive, Sensitiser

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### Section 16: Other Information

Contact  
Person/Point

PRODUCT INFORMATION MANAGER: (+61) 7 5563 1222  
12-14 Production Av Ernest Queensland, Australia

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 a 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 the text.