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#### 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 applications.

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 16<sup>th</sup> March 2021

#### Section 2: Hazards Identification

GHS Classification: Acute Toxicity, Dermal (Category 4)

Acute Toxicity, Inhalation (Category 3)

Skin Corrosion (Category 1)

Serious Eye Damage (Category 1)
Respiratory Sensitisation (Category 1)
Germ Cell Mutagenicity (Category 2)
Specific Target Organ Toxicity (Category 2)
Chronic Aquatic Toxicity (Category 2)

#### GHS Label elements, including precautionary statements



Signal word Danger

#### Hazard statement(s)

H302	Harmful if swallow
H312	Harmful in contact with skin
H331	Toxic if inhaled
H314	Causes severe burns and eye damage.
H317	May cause allergic skin irritation.
H373	May cause damage to organs through prolonged or repeated
	exposure.
H341	Suspected of causing genetic defects
H411	Very toxic to aquatic life with long lasting effects.

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## Precautionary statement(s)

Obtain special instruction before use
Do not handle until all safety precautions have been read and understood
Avoid breathing dust / fumes / gas / mist / vapours / spray/
Wash skin thoroughly after handling
Do not eat, drink or smoke when using this product
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves / eye protection / face protection.
Avoid release to the environment

### Response

P301 + P330 + P331	If SWALLOWED: Rinse mouth. Do NOT induce vomiting
P302 + P303 + P352 +	If ON SKIN (or hair): Take off immediately all contaminated
P361 + P353	clothing. Rinse or wash with soap and 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.
P304 + P340	IF INHALE: Remove person to fresh air and keep comfortable
	for breathing
P333 + P313	If skin irritation or rash occurs: Get medical advice / attention.
P310	Immediately call a POISON CENTER or doctor for advice
P391	Collect spillage
P405	Store locked up

### Disposal

P501	Dispose of contents /	/ container to an appro	oved waste disposal
	plant		

## Section 3: Composition / Information on Ingredients

Chemical Name	CAS No.	Weight %
TETA, reaction products with phenol / formaldehyde	32610-77-8	40-70
Polyethylenepolyamines	68131-73-7	10-30
Triethylenetetramine	112-24-3	5-20
Triethylenetetramine, reaction product with propylene oxide	26950-63-0	1-10
Tetraethylenepentamine	112-57-2	1-10
Phenol	108-95-2	1-10

#### Section 4: First Aid Measures

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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 unto 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)

## 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.

#### Section 6: Accidental Release Measures

Emergency Wear appropriate personal protective equipment and clothing to procedures 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-sparkling 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 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.

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

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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.

#### Section 9: Physical and Chemical Properties

Form Low Viscosity Liquid

Colour Amber

Odour Ammonia-like

pH 10.3

Melting Point Not Determined

Flash Point 93°C

Boiling Point >204°C

Vapour Density Not Available

Vapour Pressure <10.34 mmHg @ 21°C

Density 1.00 to 1.05

Auto-Ignition Temperature Not Available

Flammable Limits – Lower Not Available

Flammable Limits – Upper Not Available

#### 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.N-Nitrosamines, many of which are known to be potential carcinogens, maybe formed when the product comes into contact with nitrous acid, nitriles or atmospheres with high nitrous oxide

concentrations.

Organic acids (i.e acetic acid, citric acid etc).

Mineral acids.

Sodium hypochlorite.

Product slowly corrodes copper, aluminium, zinc and galvanised

surfaces.

Reaction with peroxides may result in violent decomposition of peroxide

possibly creating an explosion.

Oxidising agent

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Nitric acid Hazardous Decomposition Ammonia

**Products** Nitrogen oxides (NOx)

Nitrogen oxide can react with water vapours to form corrosive nitric acid.

Carbon Monoxide Carbon Dioxide Nitrosamine

Section 11: **Toxicological Information** 

Acute oral toxicity

LD50 Oral Rat >3,990 mg/kg Method: Estimated

Inhalation Inhalation of aerosol may cause irritation to the upper respiratory tract.

Can cause severe eye, skin, and respiratory tract burns.

Ingestion If ingested, severe burns of the mouth and throat, as well as a danger of

perforation of the oesophagus and the stomach.

Skin Causes skin burns. This product may cause sensitisation in some

individuals.

Eyes Causes eye burns. May cause blindness.

Chronic Material is extremely destructive to tissue of the mucous membranes and **Effects** 

upper respiratory tract, eyes, and skin, spasm, inflammation and edema,

burning sensation, cough, wheezing, laryngitis, shortness of breath.

Chronic toxicity or effects from long term exposures

Carcinogenicity No data available

Reproductive toxicity No data available on the product itself

Germ cell mutagenicity

This product or a component was mutagenic in a bacterial assay. This product or a component did not cause chromosome damage in

an in vivo micronucleus assay.

Specific target organ

systemic toxicity (single exposure) Eyes, Skin

Specific target organ

No data available

systemic toxicity (repeated exposure)

Aspiration hazard No data available

Section 12: **Ecological Information** 

**Ecotoxicity** Toxicity to fish LC50 – Poecilia reticulate (guppy) 420mg/l 96hr

Toxicity to daphnia and other aquatic invertebrates EC50 Daphnia magna

(Water Flea) 24mg/l 48h

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Toxicity to algae IC50 Pseudokirchneriella subcapitata \*(Green algae)

2mg/l 72h

Persistance / Degradability Not available.

Mobility Not available.

Environmental Protection

Do not allow product to enter drains, waterways or sewers.

Section 13: **Disposal Considerations** 

Disposal Dispose of waste according to federal, EPA and state regulations.

Considerations

Section 14: **Transport Information** 

**ADG** UN/ID No: UN2320

Proper shipping name: TETRAETHYLENE-PENTAMINE

Class: 8

Tunnel Code: (E) Packing Group: III

ADR/RID Hazard ID no: 80 Marine Pollutant: Yes

IATA **UN/ID No: UN2320** 

Proper shipping name: TETRAETHYLENEPENTAMINE

Class: 8

Packing Group: III Marine Pollutant: Yes

ERG: 8L

**IMDG** UN/ID No: UN2320

Proper shipping name: TETRAETHYLENEPENTAMINE

Class: 8

Packing Group: III Marine Pollutant: Yes EmS: F-A, S-B

RID / ADR UN/ID No: UN2320

Proper shipping name: TETRAETHYLENEPENTAMINE

Class: 8

Packing Group: III

EAC: 2X HIN: 80

Marine Pollutant: Yes

Section 15: **Regulatory Information** 

Australia: Classified as hazardous according to criteria of National Regulatory

Information Occupational Health and Safety Commission (NOHSC).

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Section 16: Other Information

**Contact** PRODUCT INFORMATION MANAGER: (+61) 7 5563 1222 **Person/Point** 12-14 Production Avenue, 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.