

Material Safety Data Sheet

H209 West System Super Slow Hardener

Version 1.1



Section 1: Identification of the Substance or Mixture and of the Supplier

Trade Name : H209 West System Super Slow Hardener

Product Code : H209

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 : 11 September 2009

Section 2: Hazards Identification

Hazard Classification : HAZARDOUS SUBSTANCE. DANGEROUS GOODS

Risk Phrases

R20/21/22	Harmful by inhalation, in contact with skin and if swallowed
R34	Causes burns.
R43	May cause sensitisation by skin contact.
R52/53	Harmful 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 %
Polyoxypropylenetriamine	39423-51-3	30 - 60
Isophoronediamine	2855-13-2	10 - <30

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Formaldehyde polymer with phenol and isophoronediamine	25265-17-2	10 - <30
Phenol	108-95-2	<10

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, trained personnel should begin cardiopulmonary resuscitation immediately.
- Eye contact : Rinse immediately with plenty of water for at least 15 minutes.
- Skin contact : Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. Take off contaminated clothing and shoes immediately. NOTE TO PHYSICIANS: Application of corticosteroid cream has been effective in treating skin irritation.
- Ingestion : Never give anything by mouth to an unconscious person. If a person vomits when lying on his back, place him in the recovery position. Prevent aspiration of vomit. Turn victim's head to the side.
- Inhalation : If breathing has stopped or is laboured, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately. Move to fresh air.

Section 5: Fire Fighting Measures

- Suitable extinguishing media : Alcohol-resistant foam.
Carbon dioxide (CO₂).
Dry chemical.
Dry sand.
Limestone powder.
- Specific hazards : May generate ammonia gas. May generate toxic nitrogen oxide gases. Use of water may result in the formation of very toxic aqueous solutions. Do not allow run-off from fire fighting to enter drains or water courses. Incomplete combustion may form carbon monoxide. Downwind personnel must be evacuated. Burning produces noxious and toxic fumes.
- Special protective equipment for fire-fighters: Avoid contact with the skin. A face shield should be worn. Use personal protective equipment. Wear self contained breathing apparatus for fire fighting if necessary.

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Further information : Do not allow run-off from fire fighting to enter drains or water courses.

Section 6: Accidental Release Measures

Personal precautions : Use self-contained breathing apparatus and chemically protective clothing. Wear suitable protective clothing, gloves and eye/face protection. Evacuate personnel to safe areas.

Environmental precautions : Construct a dike to prevent spreading.

Methods for cleaning up : Approach suspected leak areas with caution. Place in appropriate chemical waste container.

Additional advice : Open enclosed spaces to outside atmosphere. If possible, stop flow of product.

Section 7: Handling and Storage

Handling Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations. Avoid breathing vapors and/or aerosols. Avoid contact with eyes. Use only in well-ventilated areas. Use personal protective equipment. When using, do not eat, drink or smoke.

Storage Store in steel containers preferably located outdoors, above ground, and surrounded by dikes to contain spills or leaks. Do not store near acids. Keep containers tightly closed in a dry, cool and well-ventilated place.

Technical measures /Precautions: Do not store in reactive metal containers.

Section 8: Exposure Controls / Personal Protection

Engineering measures Provide readily accessible eye wash stations and safety showers. Provide natural or explosion-proof ventilation adequate to ensure concentrations are kept below exposure limits.

Personal protective equipment

Respiratory protection : Wear appropriate respirator when ventilation is inadequate.

Hand protection : Neoprene gloves.
PVC disposable gloves
Butyl-rubber
Nitrile rubber.
Impervious gloves.
The breakthrough time of the selected glove(s) must be greater than the intended use period.

Eye protection : Chemical resistant goggles must be worn.

Skin and body protection : Long sleeve shirts and trousers without cuffs.

Environmental exposure controls: Construct a dike to prevent spreading.

Special instructions for protection and hygiene: Discard contaminated leather articles. Provide readily accessible eye wash stations and safety showers. Wash at

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the end of each workshift and before eating, smoking or using the toilet.

Exposure limit(s)

Phenol Time Weighted Average (TWA): EH40 WEL 2 ppm -

Phenol Time Weighted Average (TWA): EU ELV 2 ppm 7.8 mg/m³

Section 9: Physical and Chemical Properties

Form : Liquid.
Colour : Light yellow.
Odour : Ammoniacal.
Relative density : 1.00 – 1.04 (water = 1)
Vapour pressure : < 10.34 mmHg at 21 °C
Density : 0.95 – 1.00 g/cm³ (61.804 lb/ft³) at 21 °C (70 °F)
pH : Alkaline.
Boiling point/range : > 180 °C (> 356 °F)
Flash point : 104.44 °C

Section 10: Stability and Reactivity

Stability : Stable under normal conditions.
Materials to avoid : Sodium hypochlorite.
Organic acids (i.e. acetic acid, citric acid etc.).
Mineral acids.
Product slowly corrodes copper, aluminum, zinc and galvanized surfaces.
Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion.
Reactive metals (e.g. sodium, calcium, zinc etc.).
Materials reactive with hydroxyl compounds.
Oxidizing agents.

Hazardous decomposition products:
Nitric acid.
Ammonia
Nitrogen oxides (NO_x).
Nitrogen oxide can react with water vapours to form corrosive nitric acid.
Carbon monoxide.
Carbon dioxide (CO₂).
Aldehydes
Flammable hydrocarbon fragments.

Section 11: Toxicological Information

Acute Health Hazard
Ingestion : No data is available on the product itself.
Ingestion - Components
3-Aminomethyl-3,5,5-trimethylcyclohexylamine
LD50 : 1,030 mg/kg Species : Rat.
Phenol LD50 : 317 mg/kg Species : Rat.

Inhalation : No data is available on the product itself.
Skin. : LD50 : > 2,000 mg/kg
Species : Rabbit.

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Method :	Estimated.
Eye irritation/corrosion :	Severe eye irritation.
Acute dermal irritation/corrosion:	Severe skin irritation.
Sensitization :	May cause sensitization by skin contact.
Chronic Health Hazard	Absorption of phenolic solutions through the skin may be very rapid and can cause damage to the kidneys, liver, pancreas and spleen, and edema of the lungs.

Section 12: Ecological Information

Aquatic toxicity : No data is available on the product itself.

Toxicity to daphnia - Components

Phenol EC50 (48 h) : 4.2 mg/l Species : Daphnia

Phenol EC50 (48 h) : 5.55 mg/l Species : Daphnia

Phenol EC50 (48 h) : 6.6 mg/l Species : Daphnia

Toxicity to other organisms : No data available.

Persistence and degradability

Mobility : No data available.

Bioaccumulation : No data is available on the product itself.

Bioaccumulation - Components

Phenol Low bioaccumulation potential.

Section 13: Disposal Considerations

Waste from residues / unused

Products : Contact supplier if guidance is required.

Contaminated packaging : Dispose of container and unused contents in accordance with federal, state, and local requirements.

Section 14: Transport Information

ROAD & RAIL TRANSPORT:

ADG U.N. Number UN2735

ADG Proper Shipping Name Amines, liquid, corrosive, n.o.s.(Polyoxypropylenetriamine)

ADG DG Class 8

ADG Hazchem Code 3X

ADG Packing Group II

Other Information

IATA Proper shipping name : Amines, liquid, corrosive, n.o.s.
(Polyoxypropylenetriamine)

Class : 8

UN/ID No. : UN2735

Packing group : II

IMDG Proper shipping name : AMINES, LIQUID, CORROSIVE,
N.O.S. (Polyoxypropylenetriamine)

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Class : 8
UN/ID No. : UN2735
Packing group : II

Section 15: Regulatory Information

The principal components and additives of this product are included in the Australian Inventory of Chemical Substances (AICS) or comply with the requirements of the Industrial Chemicals (Notification and Assessment) Act 1989.

Poisons Schedule 5

Hazard Category HAZARDOUS SUBSTANCES
CLASSIFICATION: Corrosive. Sensitiser.

Packaging & Labelling Product is labelled in accordance with the Code of Practice for Labelling Workplace Substances.

Section 16: Other Information

Contact Person/Point

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

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.