SAFETY DATA SHEET

in accordance with 29 CFR 1910.1200, WHMIS 2022 and Safe Work Australia

Revision date: 26 March 2025 **Date of previous issue:** – **SDS No.** 491B

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

ARC CFW-HT (Part B)

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: ARC Polymer Composite to be used with glass fiber and carbon fiber wrap.

Uses advised against: No information available

Reason why uses advised against: Not applicable

1.3. Details of the supplier of the safety data sheet

Company:
A.W. CHESTERTON COMPANY
860 Salem Street
Groveland, MA 01834-1507, USA
Tel. +1 978-469-6446
(Mon. - Fri. 8:30 - 5:00 PM EST)
SDS requests: www.chesterton.com
E-mail (SDS questions): ProductSDSs@chesterton.com
E-mail: customer.service@chesterton.com

Canada: A.W. Chesterton Company Ltd., 889 Fraser Drive,
Unit 105, Burlington, Ontario L7L 4X8 – Tel. 905-335-5055

Supplier:

1.4. Emergency telephone number

24 hours per day, 7 days per week
Call Infotrac: 1-800-535-5053
Outside N. America: +1 352-323-3500 (collect)
NSW Poisons Information Centre (Australia): 13 11 26

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

2.1.1. Classification according to 29 CFR 1910.1200 / WHMIS 2022 / Safe Work Australia / GHS

Acute Tox. 4, H302, H312
Acute Tox. 5, H333
Skin corrosion, Category 1B, H314
Serious eye damage, Category 1, H318
Skin sensitization, Category 1, H317
Reproductive toxicity, Category 2, H361d
Aquatic Chronic 3, H412

2.1.2. Additional information

For full text of H-statements: see SECTIONS 2.2 and 16.

2.2. Label elements

Labeling according to 29 CFR 1910.1200 / WHMIS 2022 / Safe Work Australia / GHS

Hazard pictograms:

Signal word: Danger

Hazard statements:	H302/312	Harmful if swallowed or in contact with skin.
	H314	Causes severe skin burns and eye damage.
	H317	May cause an allergic skin reaction.
	H333	May be harmful if inhaled.
	H361d	Suspected of damaging the unborn child.
	H412	Harmful to aquatic life with long lasting effects.
Precautionary statements:	P201	Obtain special instructions before use.
	P202	Do not handle until all safety precautions have been read and understood.
	P261	Avoid breathing vapours.
	P264	Wash skin thoroughly after handling.
	P270	Do not eat, drink or smoke when using this product.
	P272	Contaminated work clothing must not be allowed out of the workplace.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/clothing and eye/face protection.
	P301/330/331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
	P303/361/353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
	P305/351/338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P310	Immediately call a POISON CENTER or doctor.
	P308/313	IF exposed or concerned: Get medical advice/attention.
	P363	Wash contaminated clothing before reuse.
	P405	Store locked up.
	P501	Dispose of contents/container to an approved waste disposal plant.
Supplemental information:	None	

2.3. Other hazards

The safety and health hazards are detailed separately for Part A and Part B. The final cured material is considered nonhazardous. Upon machining, it can only be categorized as a nuisance dust.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Hazardous Ingredients[1]	% Wt.	CAS No.	GHS Classification
Polyetheramine	50-65	9046-10-0	Acute Tox. 4, H302/312 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Chronic 3, H412
3-Aminomethyl-3,5,5-trimethylcyclohexylamine (Synonym: Isophoronediamine)	25-55	2855-13-2	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 3, H402
Benzyl alcohol	12-20	100-51-6	Acute Tox. 4, H332 Acute Tox. 4, H302 Eye Irrit. 2, H319
2-Hydroxybenzoic Acid	5	69-72-7	Acute Tox. 4, H302 Eye Dam. 1, H318 Repr. 2, H361d

For full text of H-statements: see SECTIONS 2.2 and 16.

[1] Classified according to: 29 CFR 1910.1200, 1915, 1916, 1917, Mass. Right-to-Know Law (ch. 40, M.G.L..O. 111F), WHMIS 2022, Safe Work Australia, GHS

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation: Remove to fresh air. If not breathing, administer artificial respiration. Contact physician.

Skin contact: Flood area with water while removing contaminated clothing. Wash clothing before reuse. Contact physician.

Eye contact: Flush eyes for at least 30 minutes with large amounts of water. Contact physician.

Ingestion: Do not induce vomiting without medical advice. If conscious, give 1-2 glasses of water to drink. Prevent aspiration of vomit. Turn victim's head to the side. Contact physician immediately.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. Avoid contact with skin and eyes. See section 8.2.2 for recommendations on personal protective equipment.

4.2. Most important symptoms and effects, both acute and delayed

Direct contact will cause burns to skin, eyes and mucous membranes. May cause skin sensitization as evidenced by rashes or hives.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptoms.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Carbon dioxide, dry chemical, foam or water spray

Unsuitable extinguishing media: Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products: Incomplete combustion may form carbon monoxide. May generate: ammonia gas, toxic nitrogen oxide gases.

Other hazards: Containers may rupture on heating. Do not allow runoff from firefighting to enter drains or water courses.

5.3. Advice for firefighters

Cool exposed containers with water. Recommend Firefighters wear self-contained breathing apparatus.

Australian HAZCHEM Emergency Action Code: 2 Z

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid skin contact. Utilize exposure controls and personal protection as specified in Section 8.

6.2. Environmental Precautions

Keep out of sewers, streams and waterways.

6.3. Methods and material for containment and cleaning up

Contain spill to a small area. Pick up with absorbent material (sand, sawdust, clay, etc.) and place in a suitable container for disposal. Collect rinsate for proper disposal.

6.4. Reference to other sections

Refer to section 13 for disposal advice.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid all direct contact. Avoid breathing vapours. Utilize exposure controls and personal protection as specified in Section 8. Remove contaminated clothing immediately. Wash clothing before reuse. Contaminated leather including shoes cannot be decontaminated and should be discarded. Contaminated work clothing must not be allowed out of the workplace. Keep container closed when not in use.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool, dry area.

7.3. Specific end use(s)

No special precautions.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limit values

Ingredients	OSHA PEL[1]		ACGIH TLV[2]		AUSTRALIA ES[3]	
	ppm	mg/m³	ppm	mg/m³	ppm	mg/m³
Polyetheramine	N/A	N/A	N/A	N/A	N/A	N/A
3-Aminomethyl-3,5,5-trimethylcyclohexylamine	N/A	N/A	N/A	N/A	N/A	N/A
Benzyl alcohol *	N/A	N/A	N/A	N/A	N/A	N/A
2-Hydroxybenzoic Acid	N/A	N/A	N/A	N/A	N/A	N/A

* American Industrial Hygiene Association (AIHA) recommended limit: 10 ppm, 8-hr TWA.

[1] United States Occupational Health & Safety Administration permissible exposure limits
[2] American Conference of Governmental Industrial Hygienists threshold limit values
[3] Safe Work Australia, Workplace Exposure Standards for Airborne Contaminants

Biological limit values

No biological exposure limits noted for the ingredient(s).

8.2. Exposure controls

8.2.1. Engineering measures

Provide readily accessible eye wash stations and safety showers. Provide sufficient ventilation to keep the vapor concentrations below the exposure limits.

8.2.2. Individual protection measures

Respiratory protection: Not normally needed. If exposure limits are exceeded, use an approved organic vapor respirator.

Protective gloves: Chemical resistant gloves (e.g., nitrile rubber, butyl rubber, neoprene, PVC)

Eye and face protection: Safety goggles.

Other: Impervious clothing as necessary to prevent skin contact.

8.2.3. Environmental exposure controls

Refer to sections 6 and 12.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state	liquid	**pH**	not applicable
Colour	amber	**Kinematic viscosity**	≈ 50 - 200 cSt @ 25°C
Odour	amine	**Solubility in water**	insoluble
Odour threshold	not determined	**Partition coefficient n-octanol/water (log value)**	1.34
Boiling point or range	> 204°C (> 400°F)	**Vapour pressure @ 20°C**	not determined
Melting point/freezing point	not determined	**Density and/or relative density**	0.95 kg/l
% Volatile (by volume)	< 0.2%	**Weight per volume**	7.9 lbs/gal.
Flammability	not determined	**Vapour density (air=1)**	> 1
Lower/upper flammability or explosion limits	not applicable	**Rate of evaporation (ether=1)**	< 1
Flash point	> 110°C (> 230°F)	**% Aromatics by weight**	0%
Method	PM Closed Cup	**Particle characteristics**	not applicable
Autoignition temperature	not determined	**Explosive properties**	not applicable
Decomposition temperature	280 °C (536 °F)	**Oxidising properties**	not applicable

9.2. Other information

None

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Refer to sections 10.3 and 10.5.

10.2. Chemical stability

Stable

10.3. Possibility of hazardous reactions

No dangerous reactions known under conditions of normal use.

10.4. Conditions to avoid

Temperatures above 60°C (140°F).

10.5. Incompatible materials

Strong acids and strong oxidizers like liquid Chlorine and concentrated Oxygen.

10.6. Hazardous decomposition products

Carbon Monoxide, Carbon Dioxide, NOx, aldehydes and other toxic fumes.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Primary route of exposure under normal use: Inhalation, skin and eye contact. Personnel with pre-existing allergies, eczema or skin conditions may be aggravated by exposure.

Acute toxicity -

Oral: Harmful if swallowed. ATE-mix = 652.4 mg/kg.

Substance	Test	Result
3-Aminomethyl-3,5,5-trimethylcyclohexylamine	LD50, rat	1030 mg/kg
Benzyl alcohol	LD50, rat	1230 mg/kg
2-Hydroxybenzoic Acid	LD50, rat	891 mg/kg

Dermal: Harmful in contact with skin. ATE-mix = 1896.6 mg/kg.

Substance	Test	Result
3-Aminomethyl-3,5,5-trimethylcyclohexylamine	LD50, rat	> 1840 mg/kg
Benzyl alcohol	LD50, rat	2000 mg/kg
2-Hydroxybenzoic Acid	LD50, rabbit	> 2,000 mg/kg

Inhalation: May be harmful if inhaled. ATE-mix = 22,500 ppmV.

Substance	Test	Result
Benzyl alcohol	LC50, rat, 4 h	> 4.178 mg/l (aerosol/mist) 11 mg/l (vapour)
3-Aminomethyl-3,5,5-trimethylcyclohexylamine	LC50, rat, 4 h	> 5.01 mg/l (213B,analytical)

Skin corrosion/irritation: Causes burns.

Substance	Test	Result
3-Aminomethyl-3,5,5-trimethylcyclohexylamine	Skin irritation, rabbit	Corrosive

Serious eye damage/ irritation: Causes serious eye damage.

Substance	Test	Result
3-Aminomethyl-3,5,5-trimethylcyclohexylamine	Eye irritation, rabbit (OECD 405)	Corrosive

Respiratory or skin sensitisation: May cause allergic skin sensitization.

Substance	Test	Result
3-Aminomethyl-3,5,5-trimethylcyclohexylamine	Skin sensitization, guinea pig (OECD 406)	Sensitizing

Germ cell mutagenicity: 3-Aminomethyl-3,5,5-trimethylcyclohexylamine, Benzyl alcohol: based on available data, the classification criteria are not met.

Carcinogenicity:	The International Agency for Research on Cancer (IARC) and the National Toxicology Program (NTP) have classified inhaled silica as a human carcinogen. The silica in this product does not separate from the mixture or in of itself become air-borne, therefore it does not present a hazard in normal use.
Reproductive toxicity:	2-Hydroxybenzoic Acid: Suspected of damaging the unborn child. 3-Aminomethyl-3,5,5-trimethylcyclohexylamine: developmental NOAEL > 250 mg/kg/day; maternal NOEL = 50 mg/kg/day.
STOT – single exposure:	3-Aminomethyl-3,5,5-trimethylcyclohexylamine: Based on available data, the classification criteria are not met.
STOT – repeated exposure:	Repeated inhalation of respirable free silica may cause scarring of the lungs with cough and shortness of breath. Silicosis, a delayed lung injury that is a disabling, progressive and sometimes fatal pulmonary fibrosis, may result. The silica in this product does not separate from the mixture or in of itself become air-borne, therefore it does not present a hazard in normal use. 3-Aminomethyl-3,5,5-trimethylcyclohexylamine, 90-day oral subchronic study, OECD 408: NOEL = 59 mg/kg/day (male), 62 mg/kg/day (female).
Aspiration hazard:	Based on available data, the classification criteria are not met.
Other information:	None known

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicological data have not been determined specifically for this product. The information given below is based on a knowledge of the components and the ecotoxicology of similar substances.

12.1. Toxicity

Harmful to aquatic life with long lasting effects. Polyetheramine: LC50/EC50/IC50 between 10 and 100 mg/l in the most sensitive species. 3-Aminomethyl-3,5,5-trimethylcyclohexylamine: 48 h EC50 (for daphnia) 23 mg/l (OECD 202); 72 h ErC50 (for algae) > 50 mg/l (EC 88/302); chronic NOEC (Daphnia magna, 21 days) 3 mg/l.

12.2. Persistence and degradability

Unreacted components, improperly released to the environment, can cause ground and water pollution. Polyetheramine: expected to be resistant to biodegradation. 3-Aminomethyl-3,5,5-trimethylcyclohexylamine: may biodegrade, not readily biodegradable. Benzyl alcohol, 2-Hydroxybenzoic Acid: readily biodegradable.

12.3. Bioaccumulative potential

3-Aminomethyl-3,5,5-trimethylcyclohexylamine bioconcentration in aquatic organisms is not expected to be significant (BCF, QSAR: 3.16). Benzyl alcohol: low potential for bioaccumulation (log Kow: 1.1). 2-Hydroxybenzoic Acid: low potential for bioaccumulation.

12.4. Mobility in soil

Liquid. Insoluble in water. In determining environmental mobility, consider the product's physical and chemical properties (see Section 9). 3-Aminomethyl-3,5,5-trimethylcyclohexylamine: log Koc, QSAR = 2.97. Benzyl alcohol: expected to have very high mobility in soils.

12.5. Endocrine disrupting properties

None known

12.6. Other adverse effects

None known

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Unreacted components are a special waste. Combine resin and curative. The final cured material is considered nonhazardous. Landfill sealed containers with a properly licensed facility. May be incinerated at an appropriate facility. Check local, state and national/federal regulations and comply with the most stringent requirement.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number or ID number

ADG/ADR/RID/ADN/IMDG/ICAO:	UN2735
TDG:	UN2735
US DOT:	UN2735

14.2. UN proper shipping name

ADG/ADR/RID/ADN/IMDG/ICAO:	AMINES, LIQUID, CORROSIVE, N.O.S. (ALIPHATIC AMINE)
TDG:	AMINES, LIQUID, CORROSIVE, N.O.S. (ALIPHATIC AMINE)
US DOT:	AMINES, LIQUID, CORROSIVE, N.O.S. (ALIPHATIC AMINE)

14.3. Transport hazard class(es)

ADG/ADR/RID/ADN/IMDG/ICAO: 8
TDG: 8
US DOT: 8

14.4. Packing group

ADG/ADR/RID/ADN/IMDG/ICAO: II
TDG: II
US DOT: II

14.5. Environmental hazards

MARINE POLLUTANT

14.6. Special precautions for user

NO SPECIAL PRECAUTIONS FOR USER

14.7. Maritime transport in bulk according to IMO instruments

NOT APPLICABLE

14.8. Other information

US DOT: ERG NO. 153
MAY BE SHIPPED AS LIMITED QUANTITIES IN PACKAGING HAVING A RATED CAPACITY GROSS WEIGHT OF 66 LB. OR LESS AND IN INNER PACKAGES NOT OVER 1 LITER (49 CFR 173.154 (B),(1))
IMDG: EMS F-A, S-B, IMDG SEGREGATION GROUP 18-ALKALIS
ADR: CLASSIFICATION CODE C7, TUNNEL RESTRICTION CODE (E)
ADG HAZCHEM CODE : 2X **HIN:** 88/80

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. National regulations

US EPA SARA TITLE III

312 Hazards:

Skin corrosion
Serious eye damage
Skin sensitization
Reproductive toxicity

Chemicals subject to reporting requirements of Section 313 of EPCRA and of 40 CFR 372:

None

TSCA**:** All chemical components are listed or exempted.

Other national regulations: None

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms:
ADG: Australian Dangerous Goods Code
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE: Acute Toxicity Estimate
BCF: Bioconcentration Factor
cATpE: Converted Acute Toxicity point Estimate
ES: Exposure Standard
GHS: Globally Harmonized System
ICAO: International Civil Aviation Organization
IMDG: International Maritime Dangerous Goods
LC50: Lethal Concentration to 50 % of a test population
LD50: Lethal Dose to 50% of a test population
LOEL: Lowest Observed Effect Level
N/A: Not Applicable
NA: Not Available
NOEC: No Observed Effect Concentration
NOEL: No Observed Effect Level
OECD: Organization for Economic Co-operation and Development
(Q)SAR: Quantitative Structure-Activity Relationship
REL: Recommended Exposure Limit
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS: Safety Data Sheet
STEL: Short Term Exposure Limit
STOT RE: Specific Target Organ Toxicity, Repeated Exposure
STOT SE: Specific Target Organ Toxicity, Single Exposure
TDG: Transportation of Dangerous Goods (Canada)
TWA: Time Weighted Average
US DOT: United States Department of Transportation
WHMIS: Workplace Hazardous Materials Information System
Other abbreviations and acronyms can be looked up at www.wikipedia.org.

Key literature references and sources for data:
Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST)
Chemical Classification and Information Database (CCID)
European Chemicals Agency (ECHA) - Information on Chemicals
Hazardous Chemical Information System (HCIS)
National Institute of Technology and Evaluation (NITE)
U.S. National Library of Medicine Toxicology Data Network (TOXNET)

Procedure used to derive the classification for mixtures according to GHS:

Classification	Classification procedure
Skin Corr. 1B, H314	Calculation method
Eye Dam. 1, H318	Calculation method
Skin Sens. 1, H317	Calculation method
Aquatic Chronic 3, H412	Calculation method

Relevant H-statements:
H302: Harmful if swallowed.
H312: Harmful in contact with skin.
H314: Causes severe skin burns and eye damage.
H317: May cause an allergic skin reaction.
H318: Causes serious eye damage.
H319: Causes serious eye irritation.
H332: Harmful if inhaled.
H361d: Suspected of damaging the unborn child.
H402: Harmful to aquatic life.
H412: Harmful to aquatic life with long lasting effects.

Hazard pictogram names: Corrosion, exclamation mark, health hazard

Further information: None

Date of last revision: 26 March 2025

Changes to the SDS in this revision: Original issue.

This information is based solely on data provided by suppliers of the materials used, not on the mixture itself. No warranty is expressed or implied regarding the suitability of the product for the user's particular purpose. The user must make their own determination as to suitability.