

SAFETY DATA SHEET

in accordance with 2020/878/EU (REACH, Annex II) 29 CFR 1910.1200, WHMIS 2015 and Safe Work Australia

Revision date: 16 January 2024 **Date of previous issue:** 9 January 2024 **SDS No.** 474B-3

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

1.1. Product identifier

ARC MX FG (Part B)

Unique Formula Identifier (UFI): 6G92-DHF6-SSAD-C0FC

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

Relevant identified uses: Mixed with Part A for repair of damage caused by abrasion, erosion or corrosion in FDA compliant applications.

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 Fax: +1 978-469-6785
(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

Supplier:

Canada: A.W. Chesterton Company Ltd., 889 Fraser Drive,
Unit 105, Burlington, Ontario L7L 4X8 – Tel. 905-335-5055
EU: Chesterton International GmbH, Am Lenzenfleck 23,
D85737 Ismaning, Germany – Tel. +49-89-996-5460

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 Regulation (EC) No 1272/2008 [CLP] / 29 CFR 1910.1200 / WHMIS 2015 / Safe Work Australia / GHS

Serious eye damage, Category 1, H318
Skin irritation, Category 2, H315
Skin sensitization, Category 1, H317
Hazardous to the aquatic environment, Chronic, Category 2, H411

2.1.2. Additional information

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

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP] / 29 CFR 1910.1200 / WHMIS 2015 / Safe Work Australia / GHS

Hazard pictograms:



Signal word:

Danger

Hazard statements:	H318	Causes serious eye damage.
	H315	Causes skin irritation.
	H317	May cause an allergic skin reaction.
	H411	Toxic to aquatic life with long lasting effects.
Precautionary statements:	P264	Wash hands thoroughly after handling.
	P272	Contaminated work clothing must not be allowed out of the workplace.
	P273	Avoid release to the environment.
	P280	Wear protective gloves and eye/face protection.
	P302/352	IF ON SKIN: Wash with plenty of soap and water.
	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.
	P333/313	If skin irritation or rash occurs: Get medical advice/attention.
	P362/364	Take off contaminated clothing and wash it before reuse.
	P391	Collect spillage.
	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, refer to the precautions in the safety data sheets for Part A and Part B.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Hazardous Ingredients ¹	% Wt.	CAS No./ EC No.	REACH Reg. No.	CLP/GHS Classification	SCL, M-factor, ATE
Formaldehyde polymer with 1,3-benzenedimethanamine and phenol	6 - 11	57214-10-5 500-137-0	NA	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M (acute/chronic): 1
Benzyl alcohol	3 - 7	100-51-6 202-859-9	NA	Acute Tox. 4, H302, H332 Eye Irrit. 2A, H319	ATE (oral): 1,620 mg/kg ATE (dermal): > 2,000 mg/kg ATE (inhalation, vapour): 11 mg/l
m-Phenylenebis(methylamine) (Synonym: m-Xylene-alpha, alpha'- Diamine)	3 - 6	1477-55-0 216-032-5	NA	Acute Tox. 4, H302, H332 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317 Aquatic Chronic 3, H412	ATE (oral): 980 mg/kg ATE (dermal): > 3,000 mg/kg ATE (inhalation, mist): 1.34 mg/l
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3- epoxypropane, reaction products with ethylenediamine	0.5 - 1.5	72480-18-3 500-253-1	NA	Acute Tox. 4, H302 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M (acute/chronic): 1 ATE (oral): 500 mg/kg
Other ingredients¹:					
Aluminum oxide	65 - 75	1344-28-1 215-691-6	NA	Not classified*	ATE (oral): > 5,000 mg/kg
Amorphous silica	1 - 5	112945-52-5, 7631-86-9	NA	Not classified **	ATE (oral): > 5,000 mg/kg ATE (dermal): > 2,000 mg/kg

*Substance with a workplace exposure limit.

For full text of H-statements: see SECTION 16.

¹ Classified according to: • 29 CFR 1910.1200, 1915, 1916, 1917, Mass. Right-to-Know Law (ch. 40, M.G.L..O. 111F)
• 1272/2008/EC, GHS, REACH
• WHMIS 2015
• Safe Work Australia

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:** Wash with plenty of soap and water. Take off contaminated clothing. Contact physician if irritation persists.
- Eye contact:** Flush eyes for at least 20 minutes with large amounts of water. Contact physician.
- Ingestion:** Do not induce vomiting. If conscious, dilute stomach contents with large quantities of milk or water. Contact physician immediately.
- Protection of first-aiders:** No action shall be taken involving any personal risk or without suitable training. Avoid contact with the product while providing aid to the victim. See section 8.2.2 for recommendations on personal protective equipment.

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

Risk of serious damage to eyes. Causes skin irritation. May cause an allergic skin reaction. Excessive inhalation of vapors or mists can cause coughing, chest tightness and difficulty breathing.

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

Treat symptoms.

SECTION 5: FIREFIGHTING MEASURES**5.1. Extinguishing media**

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

Unsuitable extinguishing media: No data available

5.2. Special hazards arising from the substance or mixture

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

Other hazards: Use of water may result in the formation of very toxic aqueous solutions. Do not allow runoff from firefighting to enter drains or water courses.

5.3. Advice for firefighters

A face shield should be worn. Use personal protective equipment. 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**

Evacuate area. Provide adequate ventilation. 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

Scoop up and transfer to a suitable container for 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**

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.

7.2. Conditions for safe storage, including any incompatibilities

Store between 10°C (50°F) and 32°C (90°F) in a 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		UK WEL ³		AUSTRALIA ES ⁴	
	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³
Formaldehyde polymer with 1,3-benzenedimethanamine and phenol	N/A	N/A	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	N/A	N/A
m-Phenylenebis(methylamine)	N/A	N/A	0.018 (Ceiling)	(skin)	N/A	N/A	(Peak)	0.1
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with ethylenediamine	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Aluminum oxide	(total)	15	(resp.)	1	(inhal.)	10	N/A	10
	(resp.)	5			(resp.)	4		
Amorphous silica	20 mppcf	6	(total)	10*	(inhal.)	6	N/A	2
			(resp.)	3	(resp.)	2.4		

* Particles Not Otherwise Specified (PNOS)

¹ United States Occupational Health & Safety Administration permissible exposure limits² American Conference of Governmental Industrial Hygienists threshold limit values³ EH40 Workplace exposure limits, Health & Safety Executive⁴ Safe Work Australia, Workplace Exposure Standards for Airborne Contaminants**Biological limit values**

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

Derived No Effect Level (DNEL) according to Regulation (EC) No 1907/2006:**Workers**

Substance	Route of exposure	Potential health effects	DNEL
Formaldehyde polymer with 1,3-benzenedimethanamine and phenol	Inhalation	Acute effects, local	6 mg/m ³
		Acute effects, systemic	2 mg/m ³
		Chronic effects, local	0.6 mg/m ³
	Dermal	Chronic effects, systemic	0.02 mg/m ³
		Acute effects, local	2.8 µg/cm ²
		Acute effects, systemic	7.72 µg mg/kg bw/day
		Chronic effects, local	0.167 µg/cm ²
		Chronic effects, systemic	0.385 mg/kg bw/day
Benzyl alcohol	Inhalation	Acute effects, local / Chronic effects, local	no data available
		Acute effects, systemic	110 mg/m ³
		Chronic effects, systemic	22 mg/m ³
	Dermal	Acute effects, local / Chronic effects, local	no data available
		Acute effects, systemic	40 mg/kg bw/day
		Chronic effects, systemic	8 mg/kg bw/day
m-Phenylenebis(methylamine)	Inhalation	Chronic effects, local	0.2 mg/m ³
		Chronic effects, systemic	1.2 mg/m ³
	Dermal	Chronic effects, systemic	0.33 mg/kg bw/day
Aluminum oxide	Inhalation	Chronic effects, local, Chronic effects, systemic	15.63 mg/m ³

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No 1907/2006:

Substance	Environmental protection target	PNEC
Formaldehyde polymer with 1,3-benzenedimethanamine and phenol	Fresh water	20 µg/l
	Marine water	2 µg/l
	Freshwater sediments	0.1 mg/kg
	Marine sediments	0.01 mg/kg
	Microorganisms in sewage treatment	30 mg/l
Benzyl alcohol	Soil (agricultural)	0.024 mg/kg
	Fresh water	1 mg/l
	Marine water	0.1 mg/l
	Freshwater sediments	5.27 mg/kg
	Marine sediments	0.527 mg/kg
m-Phenylenebis(methylamine)	Microorganisms in sewage treatment	39 mg/l
	Soil (agricultural)	0.456 mg/kg
	Fresh water	0.094 mg/l
	Water, intermittent release	0.152 mg/l
	Marine water	0.009 mg/l
	Freshwater sediments	0.43 mg/kg
	Marine sediments	0.043 mg/kg
	Microorganisms in sewage treatment	10 mg/l
	Soil (agricultural)	0.045 mg/kg

8.2. Exposure controls**8.2.1. Engineering measures**

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 (e.g., EN filter type A/P2).

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

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	viscous paste	pH	not applicable
Colour	yellow	Kinematic viscosity	26,000 mm ² /s @ 25°C
Odour	amine	Solubility in water	insoluble
Odour threshold	not determined	Partition coefficient n-octanol/water (log value)	not applicable
Boiling point or range	not applicable	Vapour pressure @ 20°C	not determined
Melting point/freezing point	not applicable	Density and/or relative density	2.487 kg/l
% Volatile (by volume)	0%	Weight per volume	20.7 lbs/gal.
Flammability	not determined	Vapour density (air=1)	> 1
Lower/upper flammability or explosion limits	not determined	Rate of evaporation (ether=1)	< 1
Flash point	> 99°C (> 210°F)	% Aromatics by weight	0%
Method	PM Closed Cup	Particle characteristics	not applicable
Autoignition temperature	not applicable	Explosive properties	not determined
Decomposition temperature	not determined	Oxidising properties	not determined

9.2. Other information

Dynamic viscosity: 65,000 cps @ 25°C

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

None

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, Ammonia and other toxic fumes (by combustion). Nitrogen oxide can react with water vapors to form corrosive nitric acid.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 / GHS****Primary route of exposure under normal use:** Inhalation, skin and eye contact. Personnel with pre-existing allergies and skin and eye disorders may be aggravated by exposure.**Acute toxicity -****Oral:** Based on available data on components, the classification criteria are not met. ATE-mix = 5,213 mg/kg.

Substance	Test	Result
Benzyl alcohol	LD50, rat	1,620 mg/kg
m-Phenylenebis(methylamine)	LD50, rat	980 mg/kg
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with ethylenediamine	LD50, rabbit	> 300 - < 2,000 mg/kg
Aluminum oxide	LD50, rat	> 5,000
Amorphous silica	LD50, rat	> 5,000 mg/kg

Dermal: Based on available data on components, the classification criteria are not met.

Substance	Test	Result
Benzyl alcohol	LD50, rabbit	> 2,000 mg/kg
m-Phenylenebis(methylamine)	LD50, rabbit	> 2,000 mg/kg
Amorphous silica	LD50, rat	> 2,000 mg/kg

Inhalation: Excessive inhalation of vapors or mists can cause coughing, chest tightness and difficulty breathing. ATE-mix = 296.74 mg/l (vapour).

Substance	Test	Result
Benzyl alcohol	cATpE	11 mg/l (vapour)
Benzyl alcohol	LC0, rat	4.178 mg/l (mist, maximum attainable concentration)
m-Phenylenebis(methylamine)	LC50, rat, 4 h	1.34 mg/l (mist)

Skin corrosion/irritation: Causes skin irritation.

Substance	Test	Result
ARC MX FG (Part B)	Corrositex® (OECD 435)	Non-corrosive
Benzyl alcohol	Skin irritation, rabbit (OECD 404)	Not irritating
m-Phenylenebis(methylamine)	Skin irritation, rabbit (OECD 404)	Corrosive
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with ethylenediamine	Skin irritation, rabbit (OECD 404)	Not irritating

Serious eye damage/irritation:	Risk of serious damage to eyes.
Respiratory or skin sensitisation:	May cause an allergic skin reaction.
Germ cell mutagenicity:	Benzyl alcohol, m-Phenylenebis(methylamine), Aluminum oxide: based on available data, the classification criteria are not met.
Carcinogenicity:	This product contains no carcinogens as listed by the National Toxicology Program (NTP), the International Agency for Research on Cancer (IARC), the Occupational Safety and Health Administration (OSHA) or the European Chemicals Agency (ECHA).
Reproductive toxicity:	Benzyl alcohol, m-Phenylenebis(methylamine), Aluminum oxide: based on available data, the classification criteria are not met.
STOT – single exposure:	Excessive inhalation of vapors or mists can cause coughing, chest tightness and difficulty breathing.
STOT – repeated exposure:	Benzyl alcohol, m-Phenylenebis(methylamine), Aluminum oxide: based on available data, the classification criteria are not met.
Aspiration hazard:	Not expected to be an aspiration toxicant based on viscosity.

11.2. Information on other hazards

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

Toxic to aquatic life with long lasting effects. Formaldehyde polymer with 1,3-benzenedimethanamine and phenol: 96 hr EC50, Rainbow trout = 0.76 mg/l (similar material). m-Phenylenebis(methylamine) is harmful to aquatic organisms [72 h EC50 (for algae): 12 mg/l].

12.2. Persistence and degradability

Unreacted components (Parts A and B), improperly released to the environment, can cause ground and water pollution. m-Phenylenebis(methylamine): biodegradation, OECD 301B (28 days) = 49%, not readily biodegradable. Benzyl alcohol: readily biodegradable. Aluminum oxide, Amorphous silica: inorganic substances.

12.3. Bioaccumulative potential

Benzyl alcohol: low potential for bioaccumulation (log Kow = 1.1). m-Phenylenebis(methylamine): low potential for bioaccumulation (BCF < 100).

12.4. Mobility in soil

Viscous paste. Insoluble in water. In determining environmental mobility, consider the product's physical and chemical properties (see Section 9). Benzyl alcohol: expected to have very high mobility in soils. m-Phenylenebis(methylamine): log Koc = 3.11 (QSAR).

12.5. Results of PBT and vPvB assessment

Not available

12.6. Endocrine disrupting properties

None known

12.7. Other adverse effects

None known

SECTION 13: DISPOSAL CONSIDERATIONS**13.1. Waste treatment methods**

Unreacted components are a special waste (classified as hazardous according to 2008/98/EC). 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:	UN3077
TDG:	UN3077
US DOT:	UN3077

14.2. UN proper shipping name

ADG/ADR/RID/ADN/IMDG/ICAO: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(1,3-BENZENEDIMETHANAMINE/ M-PHENYLENEBIS(METHYLAMINE))

TDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(1,3-BENZENEDIMETHANAMINE/ M-PHENYLENEBIS(METHYLAMINE))

US DOT: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(1,3-BENZENEDIMETHANAMINE/ M-PHENYLENEBIS(METHYLAMINE))

14.3. Transport hazard class(es)

ADG/ADR/RID/ADN/IMDG/ICAO: 9

TDG: 9

US DOT: 9

14.4. Packing group

ADG/ADR/RID/ADN/IMDG/ICAO: III

TDG: III

US DOT: III

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.171,

MAY BE SHIPPED AS NON-RESTRICTED IN NON-BULK PACKAGINGS (882 LBS. OR LESS) BY MOTOR VEHICLE, RAIL CAR OR AIRCRAFT.

(49 CFR 171.4(C))

IMDG: EMS. F-A, S-F

MAY BE SHIPPED AS NON-RESTRICTED IN SINGLE OR COMBINATION PACKAGINGS CONTAINING A NET MASS PER SINGLE OR INNER PACKAGING OF 5 KG OR LESS.(IMDG CODE AMENDMENT 37-14, 2.10.2.7)

ICAO/IATA: MAY BE SHIPPED AS NON-RESTRICTED IN SINGLE OR COMBINATION PACKAGINGS CONTAINING A NET MASS PER SINGLE OR INNER PACKAGING OF 5 KG OR LESS. (IATA DANGEROUS GOODS REGULATION 56TH EDITION, 4.4 SPECIAL PROVISIONS A197)

ADR: CLASSIFICATION CODE M6 TUNNEL RESTRICTION CODE (E)

MAY BE SHIPPED AS NON-RESTRICTED IN SINGLE OR COMBINATION PACKAGINGS CONTAINING A NET MASS PER SINGLE OR INNER PACKAGING OF 5 KG OR LESS. (ADR 2015 VOLUME 1, CHAPTER 3.3 SPECIAL PROVISIONS 375)

ADG HAZCHEM CODE: 2Z **HIN:** 90

SECTION 15: REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****15.1.1. EU regulations**

Authorisations under Title VII: Not applicable

Restrictions under Title VIII: None

Other EU regulations: Directive 94/33/EC on the protection of young people at work.
Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances (hazard category: E2, Hazardous to the Aquatic Environment in Category Chronic 2; qualifying quantities: 200 t, 500 t)

15.1.2. National regulations**US EPA SARA TITLE III****312 Hazards:**

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

Serious eye damage
Skin irritation
Skin sensitization

None

TSCA: All chemical components are listed or exempted.

Other national regulations: National implementations of the EC Directives referred to in section 15.1.1.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

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
 CLP: Classification Labelling Packaging Regulation (1272/2008/EC)
 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
 PBT: Persistent, Bioaccumulative and Toxic substance
 (Q)SAR: Quantitative Structure-Activity Relationship
 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (1907/2006/EC)
 REL: Recommended Exposure Limit
 RID: Regulations concerning the International Carriage of Dangerous Goods by Rail
 SCL: Specific Concentration Limit
 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
 vPvB: very Persistent and very Bioaccumulative substance
 WEL: Workplace Exposure Limit
 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)
 Swedish Chemicals Agency (KEMI)
 U.S. National Library of Medicine Toxicology Data Network (TOXNET)

Procedure used to derive the classification for mixtures according to Regulation (EC) No 1272/2008 [CLP] / GHS:

Classification	Classification procedure
Eye Dam. 1, H318	Calculation method
Skin Irrit. 2, H315	Calculation method
Skin Sens. 1, H317	Calculation method
Aquatic Chronic 2, H411	Calculation method

Relevant H-statements: H302: Harmful if swallowed.
 H314: Causes severe skin burns and eye damage.
 H317: May cause an allergic skin reaction.
 H318: Causes serious eye damage.
 H332: Harmful if inhaled.
 H400: Very toxic to aquatic life.
 H410: Very toxic to aquatic life with long lasting effects.
 H411: Toxic to aquatic life with long lasting effects.
 H412: Harmful to aquatic life with long lasting effects.

Hazard pictogram names: Corrosion, exclamation mark, environment

Further information: None

Date of last revision: 16 January 2024

Changes to the SDS in this revision: Sections 3, 8.1, 11.1, 12.2.

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.