



SAFETY DATA SHEET

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

Revision date: 4 November 2023

Date of previous issue: 7 April 2022

SDS No. 119A-20

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

1.1. Product identifier

273 Electric Motor Cleaner (Aerosol)

Unique Formula Identifier (UFI): MMG9-KXND-Y4CD-RJVY

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

Removes grease, sludge, dirt from operating (or disassembled) motors and electrical systems. This is a solvent base cleaner.

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] / Safe Work Australia

Aerosol 3, H229
Skin irritation, Category 2, H315
Skin sensitization, Category 1B, H317
Eye irritation, Category 2, H319
Specific target organ toxicity – single exposure, Category 3, H336
Carcinogenicity, Category 2, H351
Hazardous to the aquatic environment, Chronic, Category 2, H411

2.1.2. Classification according to 29 CFR 1910.1200 / WHMIS 2015

Compressed gas, H280
Skin irritation, Category 2, H315
Skin sensitization, Category 1B, H317
Eye irritation, Category 2A, H319
Specific target organ toxicity – single exposure, Category 3, H336
Carcinogenicity, Category 2, H351
Hazardous to the aquatic environment, Chronic, Category 2, H411

2.1.3. Additional information

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

2.2. Label elements**2.2.1. Labelling according to Regulation (EC) No 1272/2008 [CLP] / Safe Work Australia****Hazard pictograms:****Signal word:**

Warning

Hazard statements:

H229 Pressurized container: May burst if heated.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.
 H336 May cause drowsiness or dizziness.
 H351 Suspected of causing cancer.
 H411 Toxic to aquatic life with long lasting effects.

Precautionary statements:

P201 Obtain special instructions before use.
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P251 Do not pierce or burn, even after use.
 P261 Avoid breathing vapours/spray.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/clothing 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.
 P308/313 IF exposed or concerned: Get medical advice/attention.
 P362/364 Take off contaminated clothing and wash it before reuse.
 P410/412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Supplemental information: None**2.2.2. Labelling according to 29 CFR 1910.1200 / WHMIS 2015****Hazard pictograms:****Signal word:**

Warning

Hazard statements:

H280 Contains gas under pressure; may explode if heated.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.
 H336 May cause drowsiness or dizziness.
 H351 Suspected of causing cancer.
 H411 Toxic 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.
 P271 Use only outdoors or in a well-ventilated area.
 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.
 P302/352 IF ON SKIN: Wash with plenty of soap and water.
 P304/340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P305/351/338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P308/313 IF exposed or concerned: Get medical advice/attention.
 P362/364 Take off contaminated clothing and wash it before reuse.
 P405 Store locked up.
 P410/403 Protect from sunlight. Store in a well-ventilated place.
 P501 Dispose of contents/container to an approved waste disposal plant.

Supplemental information: None**2.3. Other hazards**

None known

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS					
3.2. Mixtures					
Hazardous Ingredients¹	% Wt.	CAS No./ EC No.	REACH Reg. No.	CLP/GHS Classification	SCL, M-factor, ATE
Tetrachloroethylene	95-99	127-18-4 204-825-9	NA	Skin Irrit. 2, H315 Skin Sens. 1B, H317 Eye Irrit. 2, H319 STOT SE 3, H336 Carc. 2, H351 Aquatic Chronic 2, H411	ATE (oral): > 3,000 mg/kg ATE (dermal): > 10,000 mg/kg ATE (inhalation, vapour): > 20 mg/l
Carbon dioxide	1-5	124-38-9 204-696-9	NA	Press. Gas (Comp.), H280	ATE (inhalation, vapour): 167,857 ppm/4 h
For full text of H-statements: see SECTION 16.					
¹ Classified according to: <ul style="list-style-type: none"> • 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. Do not administer adrenaline (epinephrine). Contact physician.				
Skin contact:	Take off contaminated clothing. Wash skin with soap and water. Contact physician if irritation persists.				
Eye contact:	Flush eyes for at least 15 minutes with large amounts of water. Contact physician if irritation persists.				
Ingestion:	Do not induce vomiting. If conscious, give copious amounts of water to dilute stomach contents. 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. Avoid breathing vapours. See section 8.2.2 for recommendations on personal protective equipment.				
4.2. Most important symptoms and effects, both acute and delayed					
Excessive inhalation of vapors may result in dizziness, headache and other central nervous system effects and irritate the eyes and respiratory tract. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation.					
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:	Nonflammable. Use extinguisher appropriate to the surrounding fire.				
Unsuitable extinguishing media:	Not applicable				
5.2. Special hazards arising from the substance or mixture					
Hazardous combustion products:	Thermal decomposition can form Hydrogen Chloride and other toxic fumes.				
Other hazards:	Pressurized containers, when heated, are a potential explosive hazard.				
5.3. Advice for firefighters					
Cool exposed containers with water. Recommend Firefighters wear self-contained breathing apparatus.					
Australian HAZCHEM Emergency Action Code:	Not applicable				
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

Contain spill to a small area. Pick up with absorbent material (sand, sawdust, clay, etc.) and place in 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**

Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No Smoking. Vapors are heavier than air and will collect in low areas. Do not eat, drink or smoke in work area. Wash thoroughly after handling. Utilize exposure controls and personal protection as specified in Section 8.

7.2. Conditions for safe storage, including any incompatibilities

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C (120°F). Do not pierce or burn, even after use.

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
Tetrachloroethylene	100	–	25	172	50	345	50	340
	200	–	STEL:		STEL:		STEL:	
	(Ceiling) 300 (max, 5 min in any 3 hr)		100	689	100	689	150	1,020
Carbon dioxide	5,000	9,000	5,000	9,000	5,000	9,150	5,000	9,000
			STEL: 30,000	54,000	STEL: 15,000	27,400	STEL: 30,000	54,000

¹ United States Occupational Health & Safety Administration permissible exposure limits

² American Conference of Governmental Industrial Hygienists threshold limit values

³ EH40 Workplace exposure limits, Health & Safety Executive

⁴ Safe Work Australia, Workplace Exposure Standards for Airborne Contaminants

Biological limit values

Tetrachloroethylene:

Control parameter	Biological specimen	Sampling Time	Limit value	Basis	Notes
Tetrachloroethylene	End-exhaled air	Prior to shift	3 ppm	ACGIH	–
Tetrachloroethylene	Blood	Prior to shift	0.5 mg/l	ACGIH	–

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

Substance	Route of exposure	Potential health effects	DNEL
Tetrachloroethylene	Inhalation	Acute effects, local	275 mg/m ³
		Acute effects, systemic	275 mg/m ³
	Dermal	Chronic effects, systemic	138 mg/m ³
		Chronic effects, systemic	39.4 mg/kg bw/day

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

Substance	Environmental protection target	PNEC
Tetrachloroethylene	Fresh water	0.051 mg/l
	Marine water	0.0051 mg/l
	Water, intermittent release	0.0364 mg/l
	Microorganisms in sewage treatment	11.2 mg/l
	Freshwater sediments	0.903 mg/kg dry wt.
	Marine sediments	0.0903 mg/kg dry wt.
	Soil (agricultural)	0.01 mg/kg dry wt.

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

Use only in well-ventilated areas. If exposure limits are exceeded, provide adequate ventilation.

8.2.2. Individual protection measures

Respiratory protection: Not normally needed. If exposure limits are exceeded, use air-line or self-contained breathing apparatus (EN filter type A).

Protective gloves: Use Viton* or Polyvinyl Alcohol gloves. *DuPont's registered trademark.

Tetrachloroethylene:

Contact type	Glove material	Layer thickness	Breakthrough time*
Full	Viton	0.70 mm	> 480 min.
Splash	Nitrile rubber	0.40 mm	> 240 min.

*Determined according to EN374 standard.

Eye and face protection: Safety glasses with side-shields.

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	low viscosity liquid	pH	not applicable
Colour	clear	Kinematic viscosity	not determined
Odour	solvent odor	Solubility in water	negligible
Odour threshold	not determined	Partition coefficient n-octanol/water	2.53 (log Kow, product only)
Boiling point or range	not applicable	Vapour pressure @ 20°C	not determined
Melting point/freezing point	-22.4°C (-8.32°F)	Density and/or relative density	1.6 kg/l
% Volatile (by volume)	100	Weight per volume	13.3 lbs/gal.
Flammability	not applicable	Vapour density (air=1)	> 1
Lower/upper flammability or explosion limits	none	Rate of evaporation (ether=1)	< 1
Flash point	none	% Aromatics by weight	not determined
Method	ASTM D56	Particle characteristics	not applicable
Autoignition temperature	not applicable	Explosive properties	none
Decomposition temperature	not determined	Oxidising properties	none

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 under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under conditions of normal use.

10.4. Conditions to avoid

Open flames, red hot surfaces and electric arc machines.

10.5. Incompatible materials

Barium, Lithium and strong oxidizers like liquid Chlorine and concentrated Oxygen.

10.6. Hazardous decomposition products

Hydrogen Chloride and other toxic fumes

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 acute and chronic liver disease, rhythm disorders of the heart and neuritis are generally aggravated by exposure.

Acute toxicity -**Oral:**

Substance	Test	Result
Tetrachloroethylene	LD50, rat	> 3,000 mg/kg

Dermal:

Prolonged contact with skin is unlikely to result in absorption of harmful amounts.

Substance	Test	Result
Tetrachloroethylene	LD50, rabbit	> 10,000 mg/kg

Inhalation:

Excessive inhalation of vapors may result in dizziness, headache and other central nervous system effects and irritate the eyes and respiratory tract.

Substance	Test	Result
Tetrachloroethylene	LC50, rat, 4 h	> 20 mg/l (vapour)
Carbon dioxide	LC50, rat, 4 h	167,857 ppm

Skin corrosion/irritation:

Causes skin irritation. Tetrachloroethylene: This product produced irritation on rabbit skin (Primary Skin Irritation Index = 5.7 - 5.9).

Serious eye damage/irritation:

Causes serious eye irritation.

Respiratory or skin sensitisation:

May cause an allergic skin reaction.

Germ cell mutagenicity:

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

Carcinogenicity:

Tetrachloroethylene is considered to be an animal carcinogen by the National Toxicology Program (NTP) and the International Agency for Research on Cancer (IARC).

Reproductive toxicity:

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

STOT – single exposure:

May cause drowsiness or dizziness.

STOT – repeated exposure:

Tetrachloroethylene: Animal studies have reported liver and kidney effects. Based on available data, the classification criteria are not met.

Aspiration hazard:

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

11.2. Information on other hazards

None

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

Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/l in the most sensitive species). May cause long-term adverse effects in the aquatic environment. Chronic NOEC, 28 days, Daphnia magna (OECD 211): 0.51 mg/l.

12.2. Persistence and degradability

Tetrachloroethylene: Biodegradation may occur under anaerobic conditions; degradation is expected in the atmospheric environment within days to weeks; OECD 301C (28 days): 11% Biodegradability; Theoretical Oxygen Demand (ThOD): 0.19 mg/mg.

12.3. Bioaccumulative potential

Tetrachloroethylene: Low potential for bioaccumulation (BCF: 49, measured; log Kow: 2.53, measured).

12.4. Mobility in soil

Tetrachloroethylene: Expected to have high mobility in soils, (KOC: 50-150). Air, Henry's law constant (H): 2110 Pa.m³/mol.

12.5. Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6. Endocrine disrupting properties

No information available

12.7. Other adverse effects

None known

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

Incinerate absorbed material in an approved incinerator, or treat to appropriate treatment standard. Spent or unused solvent can be recovered and reclaimed. Check local, state and national/federal regulations and comply with the most stringent requirement. This product is classified as a hazardous waste according to 2008/98/EC.

SECTION 14: TRANSPORT INFORMATION**14.1. UN number or ID number**

ADG/ADR/RID/ADN/IMDG/ICAO: UN1950

TDG: UN1950

US DOT: UN1950

14.2. UN proper shipping name

ICAO: Aerosols, non-flammable, containing substances in Division 6.1, Packing Group III

ADG/IMDG: Aerosols

ADR/RID/ADN: Aerosols, Toxic

TDG: Aerosols, non-flammable, containing substances in Division 6.1, Packing Group III

US DOT: Aerosols, *poison, Packing Group III*

14.3. Transport hazard class(es)

ADG/ADR/RID/ADN/IMDG/ICAO: 2.2 (6.1)

TDG: 2.2 (6.1)

US DOT: 2.2 (6.1)

14.4. Packing group

ADG/ADR/RID/ADN/IMDG/ICAO: NOT APPLICABLE

TDG: NOT APPLICABLE

US DOT: NOT APPLICABLE

14.5. Environmental hazards

MARINE POLLUTANT (TETRACHLOROETHYLENE – PG III)

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: Shipped as Limited Quantity in packaging having a rated capacity gross weight of 66 lb. or less (49 CFR 173.306(a),(3),(i)).
ERG NO. 126

IMDG: EmS. F-D, S-U, MARINE POLLUTANT (TETRACHLOROETHYLENE – PG III)

ADR: Classification code 5T, Tunnel restriction code (D)

ADG HAZCHEM CODE: N/A HIN: (1)

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 92/85/EEC on the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding.
 Directive 75/324/EEC on the approximation of the laws of the Member States relating to aerosol dispensers.
 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:**

Gas under pressure

Tetrachloroethylene 127-18-4 95-99%

Skin irritation

Skin sensitization

Eye irritation

Specific target organ toxicity – single exposure

Carcinogenicity

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
Aerosol 3, H229	On basis of components and packaging
Carc. 2, H351	Bridging principle "Dilution"
Skin Irrit. 2, H315	Calculation method
Skin Sens. 3, H317	Bridging principle "Dilution"
Eye Irrit. 2, H319	Calculation method
STOT SE 3, H336	Bridging principle "Dilution"
Aquatic Chronic 2, H411	Calculation method

Relevant H-statements: H229: Pressurized container: May burst if heated.
 H315: Causes skin irritation.
 H317: May cause an allergic skin reaction.
 H319: Causes serious eye irritation.
 H336: May cause drowsiness or dizziness.
 H351: Suspected of causing cancer.
 H411: Toxic to aquatic life with long lasting effects.

Hazard pictogram names: Gas cylinder (GHS 3) exclamation mark, health hazard, environment

Further information: None

Date of last revision: 4 November 2023

Changes to the SDS in this revision: Section 1.1.

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.