



SAFETY DATA SHEET

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

Revision date: 28 January 2022 **Date of previous issue:** 24 September 2020 **SDS No.** 119B-18

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

1.1. Product identifier

Product name: 273 Electric Motor Cleaner (Bulk)

Substance name: Tetrachloroethylene

CAS No.: 127-18-4

EC No.: 204-825-9

REACH Registration No.: Not available

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] / 29 CFR 1910.1200 / WHMIS 2015 / Safe Work Australia / GHS

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

2.1.2. Australian statement of hazardous nature

Hazardous according to criteria of Safe Work Australia.

2.1.3. 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:

Warning

Hazard statements:

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.
 P261 Avoid breathing vapours.
 P264 Wash skin thoroughly after handling.
 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.
 P391 Collect spillage.
 P403/233 Store in a well-ventilated place. Keep container tightly closed.
 P405 Store locked up.
 P501 Dispose of contents/container to an approved waste disposal plant.

Supplemental information:

EC No. 204-825-9

2.3. Other hazards

None known

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.1. Substances**

Hazardous Ingredients ¹	% Wt.	CAS No.	EC No.	SCL, M-factor, ATE
Tetrachloroethylene	100	127-18-4	204-825-9	Not available

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. 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: Not combustible. Use extinguishing media suitable for 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: None known

5.3. Advice for firefighters

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

Australian HAZCHEM Emergency Action Code: Not applicable 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

Vapors are heavier than air and will collect in low areas. Keep container closed when not in use. Do not eat, drink or smoke in work area. Utilize exposure controls and personal protection as specified in Section 8. Wash thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool, dry and well-ventilated area. Keep container tightly closed.

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	N/A	25	100	20	138	50	340
	200				STEL:		STEL:	
	(Ceiling)				40	275	150	1,020
	300 (5 min in any 3 hr)							

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
		Chronic effects, systemic	138 mg/m ³
	Dermal	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 limit is 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.

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	0.52 cSt @ 25°C (77°F)
Odour	solvent odor	Solubility in water	negligible
Odour threshold	no data available	Partition coefficient n-octanol/water	2.53 (log Kow)
Boiling point or range	121°C (250°F)	Vapour pressure @ 20°C	14.2 mm Hg
Melting point/freezing point	not applicable	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 explosive 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 determined	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: LD50, rat > 3,000 mg/kg

Dermal: Prolonged contact with skin is unlikely to result in absorption of harmful amounts.
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.
LC50, rat, 4 h > 20 mg/l (vapor)

Skin corrosion/irritation: Causes skin irritation. 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. Skin sensitization, mouse: Sensitizing.

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:	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	
Endocrine disrupting properties:	No information available
Other information:	None

SECTION 12: ECOLOGICAL INFORMATION**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

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

Low potential for bioaccumulation (BCF: 49, measured; log Kow: 2.53, measured). Air, Henry's law constant (H): 2110 Pa.m³/mol.

12.4. Mobility in soil

Expected to have high mobility in soils (Koc: 50-150).

12.5. Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not 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: UN1897

TDG: UN1897

US DOT: UN1897

14.2. UN proper shipping name

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

TDG: TETRACHLOROETHYLENE

US DOT: TETRACHLOROETHYLENE

14.3. Transport hazard class(es)

ADG/ADR/RID/ADN/IMDG/ICAO: 6.1

TDG: 6.1

US DOT: 6.1

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.160

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 5 Liters (49 CFR 173.153(b,2))

Reportable Quantity: TETRACHLOROETHYLENE 100 lbs (45.4kg) per package.

IMDG: EmS. F-A, S-A**ADR:** Classification code T1, Tunnel restriction code (E)**ADG HAZCHEM CODE:** 2Z **HIN:** 60**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 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:**

Skin irritation	Tetrachloroethylene	100%	127-18-4
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:	<p>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.</p>
Key literature references and sources for data:	<p>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)</p>
Relevant H-statements:	<p>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.</p>
Hazard pictogram names:	Exclamation mark, health hazard, environment
Further information:	None
Date of last revision:	28 January 2022
Changes to the SDS in this revision:	Sections 1.3, 2.1, 2.2, 3, 4.1, 5.2, 8.1, 9.1, 11, 12.1, 12.6, 14, 15.1, 16.

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.