

SAFETY DATA SHEET

in accordance with 29 CFR 1910.1200, WHMIS 2015 and Safe Work Australia

Revision date: 12 April 2024

Date of previous issue: 4 January 2019

SDS No. 179A-24

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

1.1. Product identifier

610 Synthetic Lubricating Fluid (Aerosol)

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

Relevant identified uses: Synthetic Base Lubricant. For the lubrication of equipment operating at temperatures to 270°C (518°F).

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

Supplier:

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

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 2015

Flammable aerosol, Category 2, H223

Compressed gas, H280

Reproductive toxicity, Category 2, H361

Hazardous to the aquatic environment, Chronic, Category 3, H412

2.1.2. Classification according to Safe Work Australia / GHS 7+

Aerosol, Category 2, H223, H229

Hazardous to the aquatic environment, Chronic, Category 3, H412

2.1.3. 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 2015

Hazard pictograms:



Signal word:

Warning

| | | |
|----------------------------------|----------|--|
| Hazard statements: | H223 | Flammable aerosol. |
| | H280 | Contains gas under pressure; may explode if heated. |
| | H361 | Suspected of damaging fertility or 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. |
| | P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| | P211 | Do not spray on an open flame or other ignition source. |
| | P251 | Do not pierce or burn, even after use. |
| | P273 | Avoid release to the environment. |
| | P280 | Wear protective gloves. |
| | P308/313 | IF exposed or concerned: Get medical advice/attention. |
| | P410/412 | Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. |
| | P501 | Dispose of contents/container to an approved waste disposal plant. |

Supplemental information: None

Labeling according to Safe Work Australia

Hazard pictograms:



Signal word: Warning

| | | |
|----------------------------------|----------|--|
| Hazard statements: | H223 | Flammable aerosol. |
| | H229 | Pressurized container: May burst if heated. |
| | H412 | Harmful to aquatic life with long lasting effects. |
| Precautionary statements: | P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| | P211 | Do not spray on an open flame or other ignition source. |
| | P251 | Do not pierce or burn, even after use. |
| | P273 | Avoid release to the environment. |
| | P410/412 | Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. |
| | P501 | Dispose of contents/container to an approved waste disposal plant. |

Supplemental information: None

2.3. Other hazards

None

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

| Hazardous Ingredients ¹ | % Wt. | CAS No. | GHS Classification |
|--|---------|-------------|--|
| Decanoic acid, mixed esters with heptanoic acid, isononanoic acid, octanoic acid and pentaerythritol | 45-70 | 118685-24-8 | Aquatic Chronic 4, H413 |
| Distillates (petroleum), hydrotreated light | 5-10 | 64742-47-8 | Flam. Liq. 3, H226 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Chronic 3, H412 |
| Carbon dioxide | 1-3 | 124-38-9 | Press. Gas (Comp.), H280 |
| tris(methylphenyl) phosphate (Synonym: Tricresyl phosphate)* | 1-<2.5 | 1330-78-5 | Repr. 2; H361 Aquatic Acute 1; H400 (M-factor: 1) Aquatic Chronic 1; H410 |
| Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene | 0.8-2.2 | 68411-46-1 | Repr. 2, H361f Aquatic Chronic 3, H412 |

For full text of H-statements: see SECTION 16. *Contains less than 0.15% w/w ortho isomer.

¹ Classified according to: 29 CFR 1910.1200, 1915, 1916, 1917, Mass. Right-to-Know Law (ch. 40, M.G.L..O. 111F), WHMIS 2015, 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 immediately.

Skin contact: Wash skin with soap and water. Remove contaminated clothing. Contact physician if irritation persists.

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 10 minutes. Contact physician if irritation persists.

Ingestion: Do not induce vomiting. If person is conscious, rinse mouth with 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

May cause mild irritation to skin, eyes and respiratory tract. Inhalation of vapor concentrations in excess of exposure limits may result in dizziness, headache and other central nervous system effects. Prolonged or repeated skin contact may defat the skin and cause skin irritation.

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: High volume water jet

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products: Carbon Monoxide, Carbon Dioxide, Oxides of Phosphorus and other toxic fumes.

Other hazards: Water may cause frothing. 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: 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

Contain spill to a small area. Flush away from ignition sources with water. 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**

Utilize exposure controls and personal protection as specified in Section 8. Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No Smoking. May attack some rubber materials and paints. As with any product involved with moving equipment, care is recommended. If in doubt, stop equipment prior to application.

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 | | AUSTRALIA ES ³ | |
|--|-----------------------|-------------------|--------------------------|-------------------|---------------------------|-------------------|
| | ppm | mg/m ³ | ppm | mg/m ³ | ppm | mg/m ³ |
| Decanoic acid, mixed esters with heptanoic acid, isononanoic acid, octanoic acid and pentaerythritol | N/A | N/A | N/A | N/A | N/A | N/A |
| Distillates (petroleum), hydrotreated light | 500 | N/A | 212 * | 1,200 * | N/A | N/A |
| Carbon dioxide | 5,000 | 9,000 | 5,000 STEL: 30,000 | 9,000 54,000 | 5,000 STEL: 30,000 | 9,000 54,000 |
| tris(methylphenyl) phosphate | N/A | N/A | N/A | N/A | N/A | N/A |
| Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene | N/A | N/A | N/A | N/A | N/A | N/A |

* Based on the procedure described in appendix H, "Reciprocal calculation method for Certain Refined Hydrocarbon Solvent Vapor Mixtures" of the ACGIH TLVs® and BEIs®.

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**

No special requirements. 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 approved organic vapor respirator (EN filter type A/P).

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

Eye and face protection: Safety goggles.

Other: Long sleeves, long pants and good personal hygiene to minimize 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 | not determined |
| Odour | mild | Solubility in water | slightly soluble |
| Odour threshold | not determined | Partition coefficient n-octanol/water (log value) | not applicable |
| Boiling point or range | not determined | Vapour pressure @ 20°C | not determined |
| Melting point/freezing point | not determined | Density and/or relative density | 0.96 kg/l |
| % Volatile (by volume) | 12% | Weight per volume | 8.0 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 | 68°C (154°F), product only | % Aromatics by weight | < 0.1% |
| Method | PM Closed Cup | Particle characteristics | not applicable |
| Autoignition temperature | not determined | Explosive properties | not determined |
| Decomposition temperature | not determined | Oxidising properties | not determined |

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

Open flames, heat, sparks and red hot surfaces.

10.5. Incompatible materials

Strong oxidizers like liquid Chlorine and concentrated oxygen, caustic and acid solutions.

10.6. Hazardous decomposition products

Carbon Monoxide, Carbon Dioxide, Oxides of Phosphorus 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.

Acute toxicity -

Oral: Not expected to cause toxicity. ATE-mix > 5000 mg/kg.

| Substance | Test | Result |
|---|----------------------|---------------|
| Distillates (petroleum), hydrotreated light | LD50, rat | > 5,000 mg/kg |
| Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene | LD50, rat (OECD 401) | > 5,000 mg/kg |
| tris(methylphenyl) phosphate | LD50, rat | > 5,000 mg/kg |

Dermal: Not expected to cause toxicity. ATE-mix > 4453 mg/kg.

| Substance | Test | Result |
|---|--------------|----------------|
| Distillates (petroleum), hydrotreated light | LD50, rabbit | > 2,000 mg/kg |
| Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene | LD50, rat | > 2,000 mg/kg |
| tris(methylphenyl) phosphate | LD50, rabbit | > 10,000 mg/kg |

Inhalation: Not classified due to lack of data. Inhalation of vapor concentrations in excess of exposure limits may result in dizziness, headache and other central nervous system effects.

| Substance | Test | Result |
|---|--------------------|--------------------------|
| Distillates (petroleum), hydrotreated light | LC50, rat, 4 hours | > 5.28 mg/l (analytical) |
| tris(methylphenyl) phosphate | LC50, rat, 1 h | > 11.1 mg/l |

Skin corrosion/irritation: Prolonged or repeated skin contact may defat the skin and cause skin irritation.

| Substance | Test | Result |
|---|------------------------------------|--|
| Distillates (petroleum), hydrotreated light | Skin irritation, rabbit | Not irritating / Slightly irritating / Moderate irritation |
| Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene | Skin irritation, rabbit (OECD 404) | Not irritating |
| tris(methylphenyl) phosphate | Skin irritation, rabbit, 24 h | Not irritating |

Serious eye damage/irritation:

Not classified due to lack of data.

| Substance | Test | Result |
|---|-----------------------------------|--------------------------------------|
| Distillates (petroleum), hydrotreated light | Eye irritation, rabbit | Not irritating / Slightly irritating |
| Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene | Eye irritation, rabbit (OECD 405) | Not irritating |
| tris(methylphenyl) phosphate | Eye irritation, rabbit | Not irritating |

Respiratory or skin sensitisation:

Not classified due to lack of data.

| Substance | Test | Result |
|---|---|-----------------|
| Distillates (petroleum), hydrotreated light | Skin sensitization, guinea pig | Not sensitizing |
| Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene | Skin sensitization, guinea pig (OECD 406) | Not sensitizing |
| tris(methylphenyl) phosphate | Skin sensitization | Not sensitizing |

Germ cell mutagenicity:

Decanoic acid, mixed esters with heptanoic acid, isononanoic acid, octanoic acid and pentaerythritol, Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene, Ames test: negative. tris(methylphenyl) phosphate: not expected to be a germ cell mutagen (In vitro test). Distillates (petroleum), hydrotreated light: not expected to be a germ cell mutagen.

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:

Tricresyl phosphate has caused impaired fertility in animal ingestion studies. Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene has produced effects on fertility in animal ingestion studies.

STOT – single exposure:

Not classified due to lack of data. Distillates (petroleum), hydrotreated light: May cause drowsiness or dizziness. Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene, tris(methylphenyl) phosphate: based on available data, the classification criteria are not met.

STOT – repeated exposure:

Not classified due to lack of data. Distillates (petroleum), hydrotreated light, tris(methylphenyl) phosphate: based on available data, the classification criteria are not met.

Aspiration hazard:

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

Other information:

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

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

12.2. Persistence and degradability

Distillates (petroleum), hydrotreated light: can degrade in air; inherently biodegradable. tris(methylphenyl) phosphate: biodegradable.

12.3. Bioaccumulative potential

tris(methylphenyl) phosphate: may bioaccumulate.

12.4. Mobility in soil

Liquid. Slightly soluble in water. In determining environmental mobility, consider the product's physical and chemical properties (see Section 9). Distillates (petroleum), hydrotreated light: will rapidly evaporate to the air if released into the environment. tris(methylphenyl) phosphate: expected to be relatively immobile in soil.

12.5. Endocrine disrupting properties

No information available

12.6. Other adverse effects

None known

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

Incinerate absorbed material with a properly licensed facility. Incinerate pressurized or sealed containers in an approved 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: UN1950
TDG: UN1950
US DOT: UN1950

14.2. UN proper shipping name

ICAO: AEROSOLS, FLAMMABLE
ADG/IMDG: AEROSOLS
ADR/RID/ADN: AEROSOLS, FLAMMABLE
TDG: AEROSOLS, FLAMMABLE
US DOT: AEROSOLS, FLAMMABLE

14.3. Transport hazard class(es)

ADG/ADR/RID/ADN/IMDG/ICAO: 2.1
TDG: 2.1
US DOT: 2.1

14.4. Packing group

ADG/ADR/RID/ADN/IMDG/ICAO: NOT APPLICABLE
TDG: NOT APPLICABLE
US DOT: NOT APPLICABLE

14.5. Environmental hazards

NO ENVIRONMENTAL HAZARDS

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, SHIPPED AS LIMITED QUANTITY
ADR: CLASSIFICATION CODE 5F, TUNNEL RESTRICTION CODE (E), SHIPPED AS LIMITED QUANTITY
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. National regulations****US EPA SARA TITLE III****312 Hazards:**

Flammable aerosol
 Gas under pressure
 Reproductive toxicity

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

None

TSCA: All 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
 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
 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 |
|-------------------------|--------------------------|
| Flam. Aerosol 2, H223 | On basis of test data |
| Aquatic Chronic 3, H412 | Calculation method |

Relevant H-statements: H226: Flammable liquid and vapour.
 H280: Contains gas under pressure; may explode if heated.
 H304: May be fatal if swallowed and enters airways.
 H315: Causes skin irritation.
 H336: May cause drowsiness or dizziness.
 H361: Suspected of damaging fertility or the unborn child.
 H361f: Suspected of damaging fertility.
 H373: May cause damage to organs through prolonged or repeated exposure.
 H400: Very toxic to aquatic life.
 H410: Very toxic to aquatic life with long lasting effects.
 H412: Harmful to aquatic life with long lasting effects.
 H413: May cause long lasting harmful effects to aquatic life.

Hazard pictogram names: Flame, gas cylinder (GHS < 4) health hazard (US/Can.)

Further information: None

Date of last revision: 12 April 2024

Changes to the SDS in this revision: Sections 1.2, 1.3, 2.1, 2.2, 3, 5.2, 5.3, 8.1, 9.1, 11, 12.5, 13, 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.