SAFETY DATA SHEET

in accordance with 1907/2006/EC (REACH, as amended by 2015/830/EU) and 29 CFR 1910.1200

Revision date: October 12, 2018 **Initial date of issue:** 5 July 2007 **SDS No.** 108A-21b

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

1.1. Product identifier

601 Chain Drive Pin & Bushing Lubricant (Aerosol)

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

Petroleum base lubricant.

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): ProductMSDSs@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
EU: Chesterton International GmbH, Am Lenzenfleck 23, D85737 Ismaning, Germany – Tel. +49-89-996-5460

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 Regulation (EC) No 1272/2008 [CLP] / GHS

Aerosol 3, H229
Asp. Tox. 1, H304*

2.1.2. Classification according to 29 CFR 1910.1200 / WHMIS 2015 / GHS

Press. Gas (Comp.), H280
Asp. Tox. 1, H304

2.1.3. Classification according to WHMIS 1988

A: Compressed gases

2.1.4. Australian statement of hazardous nature

Hazardous according to criteria of Safe Work Australia.

2.1.5. Additional information

For full text of H-statements: see SECTIONS 2.2 and 16.
*Labelling not required for aerosols containing substances or mixtures classified as presenting an aspiration hazard, under Article 23 of the CLP.

2.2. Label elements

2.2.1. Labelling according to Regulation (EC) No 1272/2008 [CLP] / GHS

Hazard pictograms: None

Signal word: Warning

Hazard statements:	H229	Pressurized container: May burst if heated.
Precautionary statements:	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.
	P410/412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C.
	P501	Dispose of contents/container to an approved waste disposal plant.
Supplemental information:	None	

2.2.2. Labelling according to 29 CFR 1910.1200 / WHMIS 2015 / GHS

Hazard pictograms:

Signal word:	Danger	
Hazard statements:	H280	Contains gas under pressure; may explode if heated.
	H304	May be fatal if swallowed and enters airways.
Precautionary statements:	P301/310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
	P331	Do NOT induce vomiting.
	P405	Store locked up.
	P410/403	Protect from sunlight. Store in a well-ventilated place.
	P501A	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./ EC No.**	**REACH Reg. No.**	**CLP/GHS Classification**
Distillates (petroleum), hydrotreated heavy naphthenic*	70-80	64742-52-5 265-155-00	01-2119467 170-45	Asp. Tox. 1, H304
Carbon dioxide	1-5	124-38-9 204-696-9	NA	Press. Gas (Comp.), H280
Polyoxyethylene oleyl ether phosphate	0.1-0.5	39464-69-2	NA	Skin Irrit. 2, H315 Eye Dam, H318 Aquatic Acute 1, H400 Aquatic Chronic 3, H412
Other ingredients: Acetic acid, C11-14-isoalkyl esters, C13-rich	5-10	108419-35-8 283-740-9	NA	Not classified

*Contains less than 3 % DMSO extract as measured by IP 346. 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), California Proposition 65
* 1272/2008/EC, REACH
* WHMIS 2015
* Safe Work Australia [NOHSC: 1008 (2004)]

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 skin with soap and water. 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. Contact physician if irritation persists.

Ingestion: Do not induce vomiting. Contact physician immediately.

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

Aspiration into the lungs may cause chemical pneumonitis or pulmonary oedema. High vapor concentration can cause eye and respiratory irritation, headache and dizziness. 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: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Carbon dioxide, dry chemical or foam

Unsuitable extinguishing media: High volume water jet

5.2. Special hazards arising from the substance or mixture

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.

Flammability Classification: –

HAZCHEM Emergency Action Code: 3 Y

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

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

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
Oil mist, mineral	–	5	–	5	–	–	–	5
Carbon dioxide	5000	9000	5000 STEL: 30000	9000 54000	5000 STEL: 15000	9150 27400	5000 STEL: 30000	9000 54000
Polyoxyethylene oleyl ether phosphate	–	–	–	–	–	–	–	–
Acetic acid, C11-14-isoalkyl esters, C13-rich**	–	–	–	–	–	–	–	–

**Chesterton recommended limit, 8-hr TWA: 50 ppm, 10 mg/m^3.

[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] Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003].

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 a half or full-face respirator with combined dust/organic vapour filter.

Protective gloves: If needed, use chemical resistant gloves (e.g. Viton*, neoprene, nitrile). *DuPont's registered trademark.

Eye and face protection: Safety goggles or glasses.

Other: None

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	**Odour**	mild petroleum odor
Colour	amber	**Odour threshold**	not determined
Initial boiling point	220°C (428°F)	**Vapour pressure @ 20°C**	not determined
Melting point	not determined	**% Aromatics by weight**	< 1%
% Volatile (by volume)	9%, product only	**pH**	not applicable
Flash point	144°C (290°F)	**Relative density**	0.9 kg/l, product only
Method	PM Closed Cup, product only	**Weight per volume**	7.5 lbs/gal., product only
Viscosity	28 cps @ 25°C	**Coefficient (water/oil)**	< 1
Autoignition temperature	not determined	**Vapour density (air=1)**	> 1
Decomposition temperature	not determined	**Rate of evaporation (ether=1)**	< 1
Upper/lower flammability or explosive limits	not determined	**Solubility in water**	slightly soluble
Flammability (solid, gas)	not applicable	**Oxidising properties**	not determined
Explosive properties	not determined		

9.2. Other information

Kinematic viscosity at 40°C: 16.8 cSt.

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 and red hot surfaces.

10.5. Incompatible materials

Caustics, strong oxidizers like liquid Chlorine and concentrated Oxygen.

10.6. Hazardous decomposition products

Carbon Monoxide, Carbon Dioxide 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: ATE-mix > 5982 mg/kg

Substance	Test	Result
Distillates (petroleum), hydrotreated heavy naphthenic	LD50, rat	> 5000 mg/kg, estimated
Acetic acid, C11-14-isoalkyl esters, C13-rich	LD50, rat	> 5000

Dermal: ATE-mix > 3671 mg/kg

Substance	Test	Result
Distillates (petroleum), hydrotreated heavy naphthenic	LD50, rat	> 2000 mg/kg, estimated
Acetic acid, C11-14-isoalkyl esters, C13-rich	LD50, rabbit	> 3160 mg/kg

Inhalation: High vapor concentration can cause eye and respiratory irritation, headache and dizziness.

Substance	Test	Result
Distillates (petroleum), hydrotreated heavy naphthenic	LC50, rat, 4 hours	> 5 mg/l, estimated

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

Substance	Test	Result
Distillates (petroleum), hydrotreated heavy naphthenic	Skin irritation, rabbit	< 0.5 / 8.0, estimated
Acetic acid, C11-14-isoalkyl esters, C13-rich	Skin irritation, rabbit	Slightly irritating

Serious eye damage/ irritation: May cause mild eye irritation.

Substance	Test	Result
Distillates (petroleum), hydrotreated heavy naphthenic	Eye irritation, rabbit	< 15 / 110, estimated
Acetic acid, C11-14-isoalkyl esters, C13-rich	Eye irritation	Slightly irritating

Respiratory or skin sensitisation: Distillates (petroleum), hydrotreated heavy naphthenic: Skin sensitization is indicated as non-sensitizing based on data from similar products. Acetic acid, C11-14-isoalkyl esters, C13-rich: did not produce any evidence of skin irritation or skin sensitization response in a repeated insult patch test in human volunteers.

Germ cell mutagenicity: Distillates (petroleum), hydrotreated heavy naphthenic: this substance is considered non-mutagenic and has a negative potential for tumor development based on results from the Modified Ames Assay, with a Mutagenic Index of less than 1.0. Acetic acid, C11-14-isoalkyl esters, C13-rich: expected to be non-mutagenic based on data from similar materials.

Carcinogenicity: As per 29 CFR 1910.1200 (Hazard Communication), 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 Regulation (EC) No 1272/2008.

Reproductive toxicity: Distillates (petroleum), hydrotreated heavy naphthenic: based on available data, the classification criteria are not met. Acetic acid, C11-14-isoalkyl esters, C13-rich, maternal NOAEL, rat: 500 mg/kg/day; developmental NOAEL, rat: 2500 mg/kg/day.

STOT-single exposure: Distillates (petroleum), hydrotreated heavy naphthenic: based on available data, the classification criteria are not met.

STOT-repeated exposure: Distillates (petroleum), hydrotreated heavy naphthenic: based on available data, the classification criteria are not met. Acetic acid, C11-14-isoalkyl esters, C13-rich, NOAEL, 90-day oral subchronic study, rat: 500 mg/kg/day.

Aspiration hazard: May be fatal if swallowed and enters airways.

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

Distillates (petroleum), hydrotreated heavy naphthenic: available data indicate this product is not acutely toxic. Polyoxyethylene oleyl ether phosphate: Harmful to aquatic life with long lasting effects (algae, based on data from similar materials.).

12.2. Persistence and degradability

Distillates (petroleum), hydrotreated heavy naphthenic: 31% biodegradation (OECD 301F, 28 days). Acetic acid, C11-14-isoalkyl esters, C13-rich: expected to biodegrade slowly in soil and water. Polyoxyethylene oleyl ether phosphate: readily biodegradable.

12.3. Bioaccumulative potential

Distillates (petroleum), hydrotreated heavy naphthenic: not expected to bioaccumulate. Acetic acid, C11-14-isoalkyl esters, C13-rich: may bioaccumulate. Polyoxyethylene oleyl ether phosphate: no data available.

12.4. Mobility in soil

Low viscosity liquid. Slightly soluble in water. In determining environmental mobility, consider the product's physical and chemical properties (see Section 9). Distillates (petroleum), hydrotreated heavy naphthenic: large volumes may penetrate soil and contaminate groundwater. Acetic acid, C11-14-isoalkyl esters, C13-rich expected to have high affinity for adsorption to soil and sediments.

12.5. Results of PBT and vPvB assessment

Not available

12.6. Other adverse effects

None

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Incinerate absorbed material with a properly licensed facility. Incinerate pressurized containers at an approved facility. Check local, state and national/federal regulations and comply with the most stringent requirement. This product is not classified as a hazardous waste according to 2008/98/EC.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

ADG/ADR/RID/ADN/IMDG/ICAO:	UN1950
TDG:	UN1950
US DOT:	UN1950

14.2. UN proper shipping name

ICAO:	Aerosols, Non-Flammable
ADG/IMDG:	Aerosols
ADR/RID/ADN:	Aerosols, *asphyxiant*
TDG:	Aerosols, *non-flammable*
US DOT:	Aerosols, *non-flammable*

14.3. Transport hazard class(es)

ADG/ADR/RID/ADN/IMDG/ICAO:	2.2
TDG:	2.2
US DOT:	2.2

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. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

NOT APPLICABLE

14.8. Other information

US DOT: Shipped as Consumer Commodity ORM-D in packaging having a rated capacity gross weight of 66 lb. or less (49 CFR 173.306(i)). ERG NO. 126
IMDG: EmS. F-D, S-U, Shipped as Limited Quantity
ADR: Classification code 5A, Tunnel restriction code (E), Shipped as Limited Quantity
ADG Hazchem Code: Not applicable

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: None

Restrictions under Title VIII: None

Other EU regulations: Directive 75/324/EEC on the approximation of the laws of the Member States relating to aerosol dispensers

15.1.2. National regulations

US EPA SARA TITLE III

312 Hazards:	**313 Chemicals:**
Fire Immediate Pressure Release	None

Other national regulations: National implementation of the EC Directive 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:

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
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 Substances Information System (HSIS)
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]:

Classification	Classification procedure
Aerosol 3, H229	Aerosol dispenser
Asp. Tox. 1, H304	On basis of components and test data

Relevant H-statements: H280: Contains gas under pressure; may explode if heated.
H304: May be fatal if swallowed and enters airways.
H315: Causes skin irritation.
H318: Causes serious eye damage.
H400: Very toxic to aquatic life.
H412: Harmful to aquatic life with long lasting effects.

Hazard pictogram names: Gas cylinder (non-CLP) health hazard (non-CLP).

Changes to the SDS in this revision: Sections 1.4, 2.1, 2.2, 14.

Revision date: 26 September 2016

Further information: None

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.