



**MATERIAL SAFETY DATA SHEET**

in accordance with 91/155/EEC

**1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING**

**Product Name:** 601 Chain Drive Pin & Bushing Lubricant (Bulk)

**Date of Preparation:** 12 March 2003

**MSDS No.** 108B-14

Not classified as hazardous according to criteria of Worksafe Australia.

**Company:**

A.W. CHESTERTON COMPANY  
225 Fallon Road  
Stoneham, MA 02180-2999, USA  
Tel.: 781-438-7000  
(Mon. - Fri. 8:30 - 5:00 PM EST)

**Supplier:**

**For Chemical Emergency:**

24 hours per day, 7 days per week

Call Infotrac: 1-800-535-5053

Outside N. America: 352-323-3500 (collect)

**Use:** Petroleum base lubricant

**2. COMPOSITION / INFORMATION ON INGREDIENTS**

Hazardous Ingredients <sup>†</sup>	% Wt.	CAS No.	EC No.	Symbol	R-phrases
Oxo-Alcohol Acetic Acid Ester	5-10	108419-35-8	283-740-9	–	–
N-Methyl-2-Pyrrolidone	1-5	872-50-4	212-828-1	Xi	36/38

Other Ingredients<sup>†</sup>:

Distillates (Petroleum), Hydrotreated	70-80	64742-53-6	265-156-6	–	–
Naphthenic <sup>+</sup>		64742-52-5	265-155-0		

See section 15 for labelling R-phrases and section 16 for others. <sup>†</sup>Contains less than 3 % DMSO extract as measured by IP 346.

**3. HAZARDS IDENTIFICATION**

Direct eye contact may cause eye irritation. 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. FIRST AID MEASURES**

<b>Inhalation:</b>	Remove to fresh air. If not breathing, administer artificial respiration. Contact physician.
<b>Skin Contact:</b>	Wash skin with soap and water. Contact physician if irritation persists.
<b>Eye Contact:</b>	Flush eyes for at least 15 minutes with large amounts of water. Contact physician if irritation persists.
<b>Ingestion:</b>	Do not induce vomiting. Contact physician immediately.
<b>Advice to Physician:</b>	Treat symptoms.

**5. FIRE FIGHTING MEASURES**

**Extinguishing Methods:** Carbon Dioxide, dry chemical or foam

**Unusual Fire and Explosion Hazards:** none

**Special Fire Fighting Measures:** Cool exposed containers with water. Recommend Firefighters wear self-contained breathing apparatus.

**Flammability Classification:** -

**HAZCHEM Emergency Action Code:** 3 **Z**

**6. ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:** Evacuate area. Provide adequate ventilation. Utilize exposure controls and personal protection as specified in Section 8.

**Environmental Precautions:** Keep out of sewers, streams and waterways.

**Methods of Clean Up:** Contain spill to a small area. Pick up with absorbent material (sand, sawdust, clay, etc.) and place in a suitable container for disposal.

**7. HANDLING AND STORAGE**

**Handling:** Utilize exposure controls and personal protection as specified in Section 8.

**Storage:** Keep container closed when not in use. Store in a cool, dry area.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

Hazardous Ingredients	OSHA		ACGIH TLV		AUSTRALIA	
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Oxo-Alcohol Acetic Acid Ester	*		*		*	
Oil Mist, Mineral	-	5	-	5 STEL 10	-	5
N-Methyl-2-Pyrrolidone	**		**		**	

\*Chesterton recommended limit: 50 ppm. \*\*Chesterton recommended limit: 100 ppm.

**Respiratory Protection:** Not normally needed. If exposure limits are exceeded, use approved organic vapor respirator.

**Ventilation:** No special requirements. If exposure limits are exceeded, provide adequate ventilation.

**Protective Gloves:** Chemical resistant gloves (e.g., rubber, nitrile). If required, use rubber or neoprene.

**Eye Protection:** Safety goggles or glasses.

**Other:** Impervious gloves and clothing as necessary for repetitive, prolonged contact with liquid.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical state</b>	low viscosity liquid	<b>Odour</b>	petroleum odor
<b>Colour</b>	amber	<b>Vapour pressure @ 20°C</b>	not determined
<b>Initial boiling point</b>	220°C (428°F)	<b>% Aromatics by weight</b>	< 1%
<b>Melting point</b>	not determined	<b>pH</b>	not applicable
<b>% Volatile (by volume)</b>	9%	<b>Density</b>	0,9 kg/l
<b>Flash point</b>	118°C (245°F)	<b>Weight per volume</b>	7.5 lbs/gal.
<b>Method</b>	PM Closed Cup	<b>Coefficient (water/oil)</b>	< 1
<b>Viscosity</b>	28 cps @ 25°C	<b>Vapour density (air=1)</b>	> 1
<b>Autoignition temp.</b>	not determined	<b>Rate of evaporation (ether=1)</b>	< 1
<b>Explosion limits</b>	not determined	<b>Solubility in water</b>	slightly soluble
		<b>Other</b>	none

**10. STABILITY AND REACTIVITY**

<b>Stability:</b>	Stable
<b>Hazardous Polymerization:</b>	Will not occur.
<b>Hazardous Decomposition Products:</b>	Carbon Monoxide, Carbon Dioxide and other toxic fumes.
<b>Conditions to Avoid:</b>	Open flames and red hot surfaces.
<b>Materials to Avoid:</b>	Caustics, strong oxidizers like liquid Chlorine and concentrated Oxygen.

**11. TOXICOLOGICAL INFORMATION**

<b>Primary Route of Exposure Under Normal Use:</b>	Inhalation, skin and eye contact.
<b>Acute Effects:</b>	Direct eye contact causes eye irritation. High vapor concentration can cause eye and respiratory irritation, headache and dizziness.
<b>Chronic Effects:</b>	Prolonged or repeated skin contact may defat the skin and cause skin irritation.
<b>Other Information:</b>	As per 29 CFR 1910.1200 (Hazard Communication), this product contains no carcinogens as listed in the National Toxicology Program (NTP), the International Agency for Research on Cancer (IARC) or the Occupational Safety and Health Administration (OSHA).

**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.

<b>Mobility:</b>	Low viscosity liquid. Solubility in water: negligible. In determining environmental mobility, consider the product's physical and chemical properties (see Section 9). Oil products, improperly released to the environment, can cause ground and water pollution. N-Methyl-2-Pyrrolidone: expected to have very high mobility in soils.
<b>Degradability:</b>	Oil: not readily biodegradable. N-Methyl-2-Pyrrolidone: oxidizes rapidly by photochemical reactions in air and water; may biodegrade.
<b>Accumulation:</b>	Oil: not expected to bioaccumulate. N-Methyl-2-Pyrrolidone: low potential for bioaccumulation
<b>Ecotoxicity:</b>	not determined

**13. DISPOSAL CONSIDERATIONS**

Incinerate absorbed material with a properly licensed facility. Free product should be incinerated or may be amenable to fuels blending. Check local, state and national/federal regulations and comply with the most stringent requirement.

**EWC-code:** 13 02 02

14. TRANSPORT INFORMATION									
<b>TDG:</b> NONHAZARDOUS, NOT REGULATED	<b>U.S. DOT :</b> Shipping Name: NONHAZARDOUS Hazard Class: NOT REGULATED UN/NA # : NOT APPLICABLE Packaging Group # NOT APPLICABLE Emergency Response Guide Book No. - NOT APPLICABLE								
<b>IMDG:</b> NONHAZARDOUS, NOT REGULATED									
<b>IATA/ICAO:</b> NONHAZARDOUS, NOT REGULATED									
<b>ADR/RID:</b> NONHAZARDOUS, NOT REGULATED									
15. REGULATORY INFORMATION									
<b>European Classification:</b> <sup>†</sup> none									
<b>R-Phrase(s):</b> none									
<b>S-Phrase(s):</b> -									
<b>Name of the substances on the label:</b> none									
<b>Other labelling information:</b> none									
<b>Canadian Classification:</b> <sup>†</sup> D2B: Toxic materials causing other effects									
<b>Risk Phrase(s):</b> May irritate eyes and skin.									
<b>Precautionary and First Aid Measure(s):</b> Wear eye protection. Avoid contact with skin. In case of contact with eyes, rinse with plenty of water and seek medical advice.									
<b>Other labelling information:</b> none									
16. OTHER INFORMATION									
<b>US EPA SARA TITLE III</b>	<b>Hazardous Materials Identification System (HMIS)</b>								
<b>312 Hazards :</b> Immediate	<table border="1"> <tr> <td><b>HEALTH</b></td> <td><b>1</b></td> </tr> <tr> <td><b>FLAMMABILITY</b></td> <td><b>1</b></td> </tr> <tr> <td><b>REACTIVITY</b></td> <td><b>1</b></td> </tr> <tr> <td><b>Personal Protection</b></td> <td><b>*</b></td> </tr> </table>	<b>HEALTH</b>	<b>1</b>	<b>FLAMMABILITY</b>	<b>1</b>	<b>REACTIVITY</b>	<b>1</b>	<b>Personal Protection</b>	<b>*</b>
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<b>REACTIVITY</b>	<b>1</b>								
<b>Personal Protection</b>	<b>*</b>								
<b>313 Chemicals :</b> N-Methyl-2-Pyrrolidone 1-5%	4 = Severe Hazard 3 = Serious Hazard 2 = Moderate Hazard 1 = Slight Hazard 0 = Minimal Hazard * = See Section 8								
<b>JAPAN PRTR</b>	<b>Class I Chemicals :</b>								
none	<b>Class II Chemicals :</b>								
none	none								
<b>Risk phrases in section 2:</b> R36/38: Irritating to eyes and skin.									
<b>Changes to the MSDS in this revision:</b> sections 2, 9, 12, 16; reformulation.									
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 accuracy of the data or the suitability of the product for the user's particular purpose. The user must make their own determination as to suitability.									