SAFETY DATA SHEET

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

Revision date: 9 October 2015 **Initial date of issue:** 9 October 2015 **SDS No.** 188-18

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

1.1. Product identifier

622 White Grease

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

Pure mineral oil grease with Polytetrafluoroethylene (PTFE) added. For processing and packaging machinery. A superior quality, clean, multi-purpose grease to lubricate slides, guides, moving parts of equipment in food, beverage, pharmaceutical, textile and other plants processing clean materials or packages.

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

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)

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 / GHS

Aquatic Chronic 2, H411

2.1.2. Classification according to WHMIS 1988

Not controlled

2.1.3. Australian statement of hazardous nature

Hazardous according to criteria of Safe Work Australia.

2.1.4. 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 / GHS

Hazard pictograms:

Signal word:	None	
Hazard statements:	H411	Toxic to aquatic life with long lasting effects.
Precautionary statements:	P273	Avoid release to the environment.
	P391	Collect spillage.
	P501	Dispose of contents/container to an approved waste disposal plant.
Supplemental information:	None	

2.3. Other hazards

When heated to temperatures above 260ºC (500°F), perfluorocarbon resins begin to give off vapors that may cause temporary flu-like symptoms if inhaled. Thermal decomposition leads to the formation of oxidized products containing carbon, fluorine and oxygen. The ACGIH states that no exposure limit is recommended pending determination of the toxicity of the products, but air concentration should be minimal. Likewise, when using this product avoid smoking for the same reason. Avoid contamination of tobacco products.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Hazardous Ingredients[1]	% Wt.	CAS No./ EC No.	REACH Reg. No.	CLP/GHS Classification
Zinc oxide	1-5	1314-13-2 215-222-5	NA	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Other ingredients: White mineral oil (petroleum)	70-95	8042-47-5 232-455-8	NA	Not classified*

*Substance with a workplace exposure limit.
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: Not applicable

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.

Ingestion: Do not induce vomiting. Contact physician immediately.

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

Mild transient skin and eye irritant. Prolonged or repeated skin contact may cause skin irritation.

4.3. Indication of any immediate medical attention and special treatment needed

High velocity injection under the skin may leave a bloodless puncture wound subject to infection, disfigurement, lack of blood and may require amputation. Immediate treatment by a surgical specialist is recommended.

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

None

5.3. Advice for firefighters

Cool exposed containers with water. Recommend Firefighters wear self-contained breathing apparatus to protect against hazardous decomposition products.

Flammability Classification: –

HAZCHEM Emergency Action Code: 2 Z

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

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

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

Remove contaminated clothing. Wash clothing before reuse. Wash thoroughly after handling. Avoid contamination of tobacco products. Do not smoke while using the product. Injection into the body without immediate medical treatment may cause loss of affected part of the body.

7.2. Conditions for safe storage, including any incompatibilities

Store in cool, dry area in closed containers.

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
Zinc oxide	–	15 (total) 5 (resp)	–	2 (resp) STEL: 10 (resp)	–	–	–	10
White mineral oil (petroleum)	(oil mist)	5	(oil mist)	5	–	–	–	5

[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 using under extreme heat, use local exhaust.

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 (e.g., EN filter type A/P2).

Protective gloves: Chemical resistant gloves (e.g., butyl rubber or neoprene)

Eye and face protection: Safety 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	grease	**Odour**	mild
Colour	white	**Odour threshold**	not determined
Initial boiling point	not determined	**Vapour pressure @ 20°C**	not determined
Melting point	not determined	**% Aromatics by weight**	0%
% Volatile (by volume)	0%	**pH**	not applicable
Flash point	216°C (420°F)	**Relative density**	0.95 kg/l
Method	D92	**Weight per volume**	7.9 lbs/gal.
Viscosity	3.5 million cps @ 25°C	**Coefficient (water/oil)**	< 1
Autoignition temperature	not determined	**Vapour density (air=1)**	> 1
Decomposition temperature	no data available	**Rate of evaporation (ether=1)**	< 1
Upper/lower flammability or explosive limits	not determined	**Solubility in water**	insoluble
Flammability (solid, gas)	not applicable	**Oxidising properties**	not applicable
Explosive properties	not applicable		

9.2. Other information

EPA 24: 0.15 lbs/gal, 0.18 kg/l

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

Extreme heat above 260°C (500°F).

10.5. Incompatible materials

Strong oxidizers like liquid Chlorine and concentrated Oxygen.

10.6. Hazardous decomposition products

Carbon Monoxide, Carbon Dioxide and other toxic fumes and at temperatures above 260°C (500°F) perfluorocarbon resin fumes.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Primary route of exposure under normal use: Skin and eye contact.

Acute toxicity -

Oral: ATE-mix > 4000 mg/kg

Substance	Test	Result
Zinc oxide	LD50, rat (OECD 401)	> 5000 mg/kg
White mineral oil (petroleum)	LD50, rat	> 5000 mg/kg

Dermal: ATE-mix = 2565 mg/kg

Substance	Test	Result
White mineral oil (petroleum)	LD50, rat	> 2000 mg/kg

Inhalation:

Substance	Test	Result
Zinc oxide	LC50, rat, 4 h	> 5.7 mg/l
White mineral oil (petroleum)	LC50, rat, 4 h	> 5 mg/l (mist)

Skin corrosion/irritation: Mild transient skin and eye irritant. Prolonged or repeated skin contact may cause skin irritation.

Substance	Test	Result
Zinc oxide	Skin irritation, rabbit (OECD 404)	Not irritating
White mineral oil (petroleum)	Skin irritation, rabbit	Not irritating

Serious eye damage/ irritation: Mild transient skin and eye irritant.

Substance	Test	Result
Zinc oxide	Eye irritation, rabbit (OECD 405)	Not irritating
White mineral oil (petroleum)	Eye irritation, rabbit	Not irritating

Respiratory or skin sensitisation:

Substance	Test	Result
Zinc oxide	Skin sensitization, guinea pig	Not sensitizing
White mineral oil (petroleum)	Skin sensitization, guinea pig	Not sensitizing

Germ cell mutagenicity: Zinc oxide, White mineral oil (petroleum): based on available data, the classification criteria are not met.

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: Zinc oxide, White mineral oil (petroleum): based on available data, the classification criteria are not met.

STOT-single exposure: Zinc oxide, White mineral oil (petroleum): based on available data, the classification criteria are not met.

STOT-repeated exposure: Zinc oxide, White mineral oil (petroleum): 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 known

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

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

12.2. Persistence and degradability

Mineral oil: not readily biodegradable (biodegradation, OECD 301B, 28 days: 0-24%). PTFE: nonbiodegradable. Zinc oxide: inorganic substance.

12.3. Bioaccumulative potential

The bioaccumulation of Zinc may be important in aquatic environments.

12.4. Mobility in soil

Insoluble in water. In determining environmental mobility, consider the product's physical and chemical properties (see Section 9). Mineral oil: expected to exhibit low mobility in soil.

12.5. Results of PBT and vPvB assessment

Not available

12.6. Other adverse effects

None known

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Stabilized and solidified material may be buried in an approved area. 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

ADR/RID/ADN/IMDG/ICAO:	UN3077
TDG:	UN3077
US DOT:	UN3077

14.2. UN proper shipping name

ADR/RID/ADN/IMDG/ICAO:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC OXIDE)
TDG:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC OXIDE)
US DOT:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC OXIDE)

14.3. Transport hazard class(es)

ADR/RID/ADN/IMDG/ICAO:	9
TDG:	9
US DOT:	9

14.4. Packing group

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

NOT APPLICABLE

14.8. Other information

US DOT: ERG NO.171,
May be shipped as NON-RESTRICTED in non-bulk packagings (882 lbs. or less) by motor vehicle, rail car or aircraft. (49 CFR 171.4(c))

IMDG: EmS. F-A, S-F
May be shipped as NON-RESTRICTED in single or combination packagings containing a net mass per single or inner packaging of 5 kg or less.(IMDG CODE Amendment 37-14, 2.10.2.7)

ICAO/IATA: May be shipped as NON-RESTRICTED in single or combination packagings containing a net mass per single or inner packaging of 5 kg or less. (IATA Dangerous Goods Regulation 56th edition, 4.4 Special Provisions A197)

ADR: Classification code M6 Tunnel restriction code (E)
May be shipped as NON-RESTRICTED in single or combination packagings containing a net mass per single or inner packaging of 5 kg or less. (ADR 2015 Volume 1, Chapter 3.3 Special Provisions 375)

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: None

15.1.2. National regulations

US EPA SARA TITLE III

312 Hazards:	**313 Chemicals:**
Immediate	Zinc Compound 1-5%

Other national regulations: None

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
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
NOAEL: No Observed Adverse Effect Level
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)
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)
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 de la santé et de la sécurité du travail (CSST)
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] / GHS:

Classification	Classification procedure
Aquatic Chronic 2, H411	Calculation method

Relevant H-statements:

H400: Very toxic to aquatic life.
H410: Very toxic to aquatic life with long lasting effects.
H411: Toxic to aquatic life with long lasting effects.

Hazard pictogram names: Environment

Changes to the SDS in this revision: Sections 2.1, 3, 4.1, 10.2, 11, 12.3, 15.1.2, 16.

Revision date: 9 October 2015

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.