

## SAFETY DATA SHEET

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

**Revision date:** 26 April 2018      **Initial date of issue:** 12 July 2007      **SDS No.** 283B-12a

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

**1.1. Product identifier**

787 Sliding Paste (Bulk)

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

High viscosity, solid lubricating paste for high temperature and extreme pressure use. Do not use on oxygen systems.

**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:**

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 / GHS**

Eye Dam. 1, H318  
Skin Irrit. 2, H315

**2.1.2. Classification according to WHMIS 1988**

D2A: Very toxic materials causing other effects; D2B: Toxic materials causing other effects

**2.1.3. Australian statement of hazardous nature**

Not classified as 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:**

Danger

**Hazard statements:**

H318 Causes serious eye damage.  
H315 Causes skin irritation.

**Precautionary statements:** P264 Wash skin thoroughly after handling.  
 P280 Wear protective gloves and eye/face protection.  
 P305/351/338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P310 Immediately call a POISON CENTER or doctor/physician.  
 P332/313 If skin irritation occurs: Get medical advice/attention.  
 P362/364 Take off contaminated clothing and wash it before reuse.

**Supplemental information:** None

### 2.3. Other hazards

None expected in industrial use. The Graphite, Talc and Molybdenum Disulfide listed do not separate from the mixture or become airborne, therefore do not present a hazard in normal use.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2. Mixtures

Hazardous Ingredients <sup>1</sup>	% Wt.	CAS No./ EC No.	REACH Reg. No.	CLP/GHS Classification
Boric acid*	3-< 5.5	10043-35-3 233-139-2	01-211948 6683-25	Repr. 1B, H360FD
Polyoxyethylene oleyl ether phosphate	1-4.9	39464-69-2 Polymer	NA	Eye Dam. 1, H318 Skin Irrit. 2, H315
Methanol	0.1-0.5	67-56-1 200-659-6	01-211943 3307-44	Flam. Liq. 2, H225 Acute Tox. 3, H331, H311, H301 STOT SE 1, H370
Other ingredients:				
Graphite	20-30	7782-42-5 231-955-3	01-211948 6977-12	Not classified**
Talc	10-15	14807-96-6 238-877-9	NA	Not classified**
Molybdenum Disulfide	1-5	1317-33-5 215-263-9	NA	Not classified**

\*Included on the EU Candidate List of substances of very high concern for Authorisation.

\*\*Substance with a workplace exposure limit.

For full text of H-statements: see SECTION 16.

<sup>1</sup> 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

## 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:** Flush eyes for at least 15 minutes with large amounts of water. Contact physician if irritation persists.

**Ingestion:** Do not induce vomiting. Contact physician immediately.

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

Direct contact can cause severe eye irritation, possibly burns and skin irritation. High vapor concentrations may irritate eyes, respiratory tract and possibly cause dizziness and nausea.

### 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, foam, water fog

**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.

**Flammability Classification:** not determined

**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**

No special requirements.

**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. Use caution - floor may be slippery where spill has occurred.

**6.4. Reference to other sections**

Refer to section 13 for disposal advice.

**SECTION 7: HANDLING AND STORAGE****7.1. Precautions for safe handling**

No special precautions. Wash before eating, drinking or smoking.

**7.2. Conditions for safe storage, including any incompatibilities**

Store in a cool, dry area.

**7.3. Specific end use(s)**

High viscosity, solid lubricating paste for high temperature and extreme pressure use. Refer to the product instructions and product data sheet for more detailed application information.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1. Control parameters****Occupational exposure limit values**

Ingredients	OSHA PEL <sup>1</sup>		ACGIH TLV <sup>2</sup>		UK WEL <sup>3</sup>		AUSTRALIA ES <sup>4</sup>	
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Boric acid	(resp)	10 3	(inhal) (inhal)	2 STEL: 6	–	–	–	–
Polyoxyethylene oleyl ether phosphate	–	–	–	–	–	–	–	–
Methanol	200	260	(skin) STEL: 250	262 328	200 STEL: 250	266 STEL: 333	200 (skin) STEL: 250	262 328
Graphite	(total) (resp)	15 5	(resp)	2	(inhal) (resp)	10 4	(resp)	3
Talc	(resp)	20 mppcf	(resp)	2	(resp)	1	(resp)	2.5
Molybdenum Disulfide	–	15	(inhal) (resp)	10 3	–	–	–	10

<sup>1</sup> United States Occupational Health & Safety Administration permissible exposure limits.

<sup>2</sup> American Conference of Governmental Industrial Hygienists threshold limit values.

<sup>3</sup> EH40 Workplace exposure limits, Health & Safety Executive

<sup>4</sup> Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003].

**Derived No Effect Levels (DNELs) according to Regulation (EC) No 1907/2006:****Workers**

Substance	Route of exposure	Potential health effects	DNEL
Boric acid	Inhalation	Chronic effects, systemic	8.28 mg/m <sup>3</sup>
	Dermal	Chronic effects, systemic	392.0 mg/kg/day
	Inhalation / Dermal	Acute effects, local; Acute effects, systemic; Chronic effects, local	No hazard identified
Methanol	Inhalation	Acute effects, local	260 mg/m <sup>3</sup>
		Acute effects, systemic	260 mg/m <sup>3</sup>
		Chronic effects, local	260 mg/m <sup>3</sup>
		Chronic effects, systemic	260 mg/m <sup>3</sup>
	Dermal	Acute effects, local	*
		Acute effects, systemic	40 mg/kg/day
		Chronic effects, local	*
		Chronic effects, systemic	40 mg/kg/day

\*Hazard identified but no DNEL available

**Predicted No Effect Concentrations (PNECs) according to Regulation (EC) No 1907/2006:**

Substance	Environmental protection target	PNEC
Boric acid	Fresh water / Marine water	2.02 mg/l
	Water, intermittent release	13.7 mg/l
	Air	No exposure expected
	Freshwater sediments / Marine sediments	No exposure expected
	Microorganisms in sewage treatment	10 mg/l
Methanol	Soil (agricultural)	5.4 mg/kg
	Fresh water	154 mg/l
	Freshwater sediments	570.4 mg/l
	Marine water	15.4 mg/l
	Microorganisms in sewage treatment	100 mg/l
	Soil (agricultural)	23.5 mg/kg

**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 (e.g., EN filter type A-P2).

**Protective gloves:** Chemical resistant gloves (e.g., natural rubber, neoprene or PVC)

**Eye and face protection:** Safety goggles.

**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**

<b>Physical state</b>	paste	<b>Odour</b>	mild odor
<b>Colour</b>	dark gray	<b>Odour threshold</b>	not determined
<b>Initial boiling point</b>	not determined	<b>Vapour pressure @ 20°C</b>	not determined
<b>Melting point</b>	not applicable	<b>% Aromatics by weight</b>	< 1%
<b>% Volatile (by volume)</b>	< 2%	<b>pH</b>	not applicable
<b>Flash point</b>	127°C (260°F)	<b>Relative density</b>	1.3 kg/l
<b>Method</b>	PM Closed Cup	<b>Weight per volume</b>	10.8 lbs/gal.
<b>Viscosity</b>	148K cps @ 25°C	<b>Coefficient (water/oil)</b>	< 1
<b>Autoignition temperature</b>	> 200°C (> 392°F)	<b>Vapour density (air=1)</b>	> 1
<b>Decomposition temperature</b>	not determined	<b>Rate of evaporation (ether=1)</b>	< 1
<b>Upper/lower flammability or explosive limits</b>	not determined	<b>Solubility in water</b>	insoluble
<b>Flammability (solid, gas)</b>	not applicable	<b>Oxidising properties</b>	not determined
<b>Explosive properties</b>	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**

Temperatures above 200°C (392°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.

**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, oral: 30303 mg/kg

Substance	Test	Result
Graphite	LD50, rat	> 2000 mg/kg
Boric acid	LD50, rat	2660 mg/kg
Polyoxyethylene oleyl ether phosphate	LD50, rat	42300 mg/kg
Molybdenum Disulfide	LD50, rat	> 5000 mg/kg
Methanol	LD50, rat	5628 mg/kg
Methanol	Human lethal dose	143 mg/kg

**Dermal:** ATE-mix, dermal: 90909 mg/kg

Substance	Test	Result
Boric acid	LD50, rabbit	> 2000 mg/kg
Molybdenum Disulfide	LD50, rat	> 16000 mg/kg
Methanol	LD50, rabbit	17100 mg/kg

**Inhalation:** High vapor concentrations may irritate eyes, respiratory tract and possibly cause dizziness and nausea. ATE-mix, inhalable: 909.1 mg/l

Substance	Test	Result
Graphite	LC50 rat, 4 h	> 2 mg/l (dust)
Boric acid	LC50 rat, 4 h	> 2 mg/l

**Skin corrosion/irritation:** Direct skin contact can cause irritation.

Substance	Test	Result
Graphite	Skin irritation, rabbit	Not irritating
Boric acid	Skin irritation, rabbit	Slightly irritating
Polyoxyethylene oleyl ether phosphate	Skin irritation, rabbit	Irritating
Molybdenum Disulfide	Skin irritation, rabbit	Not irritating
Methanol	Skin irritation, rabbit	Not irritating

**Serious eye damage/irritation:** Direct contact can cause severe eye irritation, possibly burns.

Substance	Test	Result
Graphite	Eye irritation, rabbit	Not irritating
Boric acid	Eye irritation, rabbit	Not irritating
Polyoxyethylene oleyl ether phosphate	Eye irritation, rabbit	Severe irritation
Methanol	Eye irritation, rabbit	Not irritating

**Respiratory or skin sensitisation:**

Substance	Test	Result
Graphite	Skin sensitization, (OECD 429) mouse	Not sensitizing
Boric acid	Skin sensitization, (OECD 406) guinea pig	Not sensitizing
Molybdenum Disulfide	Skin sensitization, (OECD 406)	Not sensitizing
Methanol	Skin sensitization, guinea pig	Not sensitizing

**Germ cell mutagenicity:** Graphite, Boric acid, Molybdenum Disulfide, Methanol: based on available data, the classification criteria are not met. Talc, Ames test: negative.

**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:** Graphite: based on available data, the classification criteria are not met. Boric Acid is embryotoxic and/or fetotoxic in animals. Methanol: data lacking.

**STOT-single exposure:** No data available

**STOT-repeated exposure:** Prolonged, excessive inhalation of Graphite dust has caused emphysema and pneumoconiosis. Repeated or prolonged inhalation of Talc dust may cause chronic cough, shortness of breath, scarring of the lungs (pulmonary fibrosis) and mild symptomatic pneumoconiosis. The Graphite and Talc listed do not separate from the mixture or become airborne, therefore do not present a hazard in normal use. Graphite, Methanol: 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

This product is expected to exhibit low toxicity to aquatic and soil organisms. Graphite: 96 h LC50 (fish) > 100 mg/l. Talc: 24 h LC50 (fish) > 100 g/l.

### 12.2. Persistence and degradability

Graphite, Boric acid, Talc, Molybdenum Disulfide: inorganic substances. Methanol: readily biodegradable.

**12.3. Bioaccumulative potential**

Boric acid: not expected to bioaccumulate (log Kow <1). Graphite, Molybdenum Disulfide, Methanol: not expected to bioaccumulate.

**12.4. Mobility in soil**

Insoluble in water. In determining environmental mobility, consider the product's physical and chemical properties (see Section 9).

**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**

Incinerate absorbed material with a properly licensed facility. Check local, state and national/federal regulations and comply with the most stringent requirement. Not classified as hazardous according to 2008/98/EC.

**SECTION 14: TRANSPORT INFORMATION****14.1. UN number**

**ADR/RID/ADN/IMDG/ICAO:** NOT APPLICABLE

**TDG:** NOT APPLICABLE

**US DOT:** NOT APPLICABLE

**14.2. UN proper shipping name**

**ADR/RID/ADN/IMDG/ICAO:** NON-HAZARDOUS, NON REGULATED

**TDG:** NON-HAZARDOUS, NON REGULATED

**US DOT:** NON-HAZARDOUS, NON REGULATED

**14.3. Transport hazard class(es)**

**ADR/RID/ADN/IMDG/ICAO:** NOT APPLICABLE

**TDG:** NOT APPLICABLE

**US DOT:** NOT APPLICABLE

**14.4. Packing group**

**ADR/RID/ADN/IMDG/ICAO:** NOT APPLICABLE

**TDG:** NOT APPLICABLE

**US DOT:** NOT APPLICABLE

**14.5. Environmental hazards**

NOT APPLICABLE

**14.6. Special precautions for user**

NOT APPLICABLE

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

NOT APPLICABLE

**14.8. Other information**

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:** Not applicable

**Restrictions under Title VIII:** None

**Other EU regulations:** None

**15.1.2. National regulations****US EPA SARA TITLE III****312 Hazards:**

Immediate  
Delayed

**313 Chemicals:**

None

**Other national regulations:** WARNING: This product contains a chemical(s) known to the State of California to cause birth defects or other reproductive harm (Methanol).

**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](http://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] / GHS:**

Classification	Classification procedure
Eye Dam. 1, H318	Calculation method
Skin Irrit. 2, H315	Calculation method

**Relevant H-statements:** H225: Highly flammable liquid and vapour.  
 H301: Toxic if swallowed.  
 H311: Toxic in contact with skin.  
 H318: Causes serious eye damage.  
 H315: Causes skin irritation.  
 H331: Toxic if inhaled.  
 H360FD: May damage fertility. May damage the unborn child.  
 H370: Causes damage to organs.

**Hazard pictogram names:** Corrosion

**Changes to the SDS in this revision:** Section 1.3.

**Date of last revision:** 26 April 2018

**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.