



SAFETY DATA SHEET

in accordance with 1907/2006/EC (REACH, as amended by 453/2010/EC) and 29 CFR 1910.1200

Revision date: 2 January 2015

Initial date of issue: 8 December 2011

SDS No. 1062-6

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

1.1. Product identifier

198; 198G

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

Style 198 is a laminated graphite sheet with an inhibitor. This material is designed for use in high temperature, high pressure, flange applications. It is recommended against steam, superheated steam, gases and most chemicals except highly oxidizing acids. It can be used up to 454°C (850°F) in an oxidizing atmosphere and 2760°C (5000°F) in a non-oxidizing atmosphere.

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 / GHS

This product does not meet the criteria for classification in any hazard class according to Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.

2.1.2. Classification according to Directives 1999/45/EC and 1975/324/EEC

This product does not meet the criteria for classification in any danger category according to Directive 1999/45/EC on classification, packaging and labelling of dangerous preparations.

2.1.4. Canadian WHMIS classification

D2B: Toxic materials causing other effects

2.1.5. Australian classification

Not classified as hazardous according to criteria of Safe Work Australia.

2.1.6. Additional information

This product is not classified as a "hazardous material" in normal use as defined in: 29 CFR 1910.1200, 1915, 1916, 1917. Massachusetts Right-To-Know Law, Chapter 40, Acts and Resolves of 1983 (M.G.L. O. 111F).

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP] / 29 CFR 1910.1200 / GHS

Hazard pictograms: None

Signal word: None

Hazard statements: None

Precautionary statements: None

Supplemental information: None

2.3. Other hazards

None expected in industrial use.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.2. Mixtures**

Hazardous Ingredients ¹	% Wt.	CAS No./ EC No.	REACH Reg. No.	Classification (CLP/GHS)	Classification (67/548/EEC)
Expanded Purified Natural Graphite	100	7782-42-5 231-955-3	NA	Not classified	Not classified

Indications of danger acc. to 67/548/EEC: Not applicable

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, 67/548/EEC, 99/45/EC, REACH
* Controlled Products Regulations
* 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: Flush eyes for at least 15 minutes with large amounts of water. Contact physician if irritation persists.

Ingestion: not applicable

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

Graphite dust may cause mechanical irritation to the skin, eyes and nasal passages. Repeated inhalation of nuisance dust in excess of exposure limits over an extended period of time may result in injury to the lungs. Symptoms can include cough, shortness of breath and decrease in pulmonary function.

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

Treat symptoms.

SECTION 5: FIRE-FIGHTING MEASURES**5.1. Extinguishing media**

Carbon Dioxide, dry chemical, foam or water fog

5.2. Special hazards arising from the substance or mixture

None

5.3. Advice for firefighters

None

Flammability Classification: not determined

HAZCHEM Emergency Action Code: 1

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

No special requirements.

6.3. Methods and material for containment and cleaning up

No special steps required.

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. Accumulations of graphite may cause shorting of electrical circuits.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool, dry area.

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
Expanded Purified Natural Graphite	15	mppcf	(resp)	2	(resp) (inhal)	4 10	(resp)	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.

8.2.2. Individual protection measures

Respiratory protection: Not normally needed. If exposure limits are exceeded, use an approved dust respirator.

Protective gloves: Not normally needed (e.g., EN filter type P).

Eye and face protection: Recommend 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	sheet	Odour	not applicable
Colour	gray	Odour threshold	not determined
Initial boiling point	not applicable	Vapour pressure @ 20°C	not applicable
Melting point	not determined	% Aromatics by weight	not applicable
% Volatile (by volume)	0.5% (water)	pH	not applicable
Flash point	not applicable	Relative density	not applicable
Method	not applicable	Weight per volume	not applicable
Viscosity	not applicable	Coefficient (water/oil)	not applicable
Autoignition temperature	not determined	Vapour density (air=1)	not applicable
Decomposition temperature	not determined	Rate of evaporation (ether=1)	not applicable
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

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

None

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. Personnel with pre-existing chronic respiratory impairments are generally aggravated by exposure.

Acute effects: Graphite dust may cause mechanical irritation to the skin, eyes and nasal passages.

Chronic effects: Repeated inhalation of nuisance dust in excess of exposure limits over an extended period of time may result in injury to the lungs. Symptoms can include cough, shortness of breath and decrease in pulmonary function.

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.

Aspiration hazard: Not applicable

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

not determined

12.2. Persistence and degradability

Graphite: inorganic substance

12.3. Bioaccumulative potential

not determined

12.4. Mobility in soil

Solid. 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

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

Unused product is not a regulated hazardous waste. Dispose in accordance with local, state and federal regulations. This product is not classified as a hazardous waste according to 2008/98/EC.

European List of Wastes code: not determined

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

Hazardous Materials Identification System (HMIS)

4 = Severe Hazard
 3 = Serious Hazard
 2 = Moderate Hazard
 1 = Slight Hazard
 0 = Minimal Hazard
 * = See Section 8

HEALTH	0
FLAMMABILITY	0
PHYSICAL HAZARD	0
Personal Protection	*

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
 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: Specific Target Organ Toxicity
 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)
 European chemical Substances Information System (ESIS)
 European Chemicals Agency (ECHA) - Information on Chemicals
 Hazardous Substances Data Bank (HSDB)
 Hazardous Substances Information System (HSIS)
 Swedish Chemicals Agency (KEMI)

Procedure used to derive the classification for mixtures according to Regulation (EC) No 1272/2008:

Classification	Classification procedure
Not applicable	Not applicable

Relevant H-statements: None

Relevant R-phrases: None

Hazard pictogram names: None

Changes to the SDS in this revision: Sections 2.1, 2.2, 5.3, 9, 12.6, 13.1.

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.