



## 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:** 3 November 2017

**Initial date of issue:** 29 January 2007

**SDS No.** 194A-20

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

#### 1.1. Product identifier

785 Parting Lubricant (Aerosol)

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

Synthetic base. Eases assembly and disassembly of metal parts by protecting against galling, self-welding, corrosion, and galvanic attack. 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](http://www.chesterton.com)  
E-mail (SDS questions): [ProductMSDSs@chesterton.com](mailto:ProductMSDSs@chesterton.com)  
E-mail: [customer.service@chesterton.com](mailto: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]

Aerosol 1, H222, H229  
Skin Irrit. 2, H315  
STOT SE 3, H336  
Aquatic Chronic 2, H411

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

Flam. Aerosol 1, H222  
Press. Gas (Comp.), H280  
Skin Irrit. 2, H315  
STOT SE 3, H336  
Aquatic Chronic 2, H411

##### 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****2.2.1. Labelling according to Regulation (EC) No 1272/2008 [CLP]****Hazard pictograms:****Signal word:**

Danger

**Hazard statements:**

H222 Extremely flammable aerosol.  
 H229 Pressurized container: May burst if heated.  
 H315 Causes skin irritation.  
 H336 May cause drowsiness or dizziness.  
 H411 Toxic to aquatic life with long lasting effects.

**Precautionary statements:**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P211 Do not spray on an open flame or other ignition source.  
 P251 Do not pierce or burn, even after use.  
 P261 Avoid breathing vapours/spray.  
 P264 Wash hands thoroughly after handling.  
 P271 Use only outdoors or in a well-ventilated area.  
 P273 Avoid release to the environment.  
 P312 Call a POISON CENTER or doctor/physician if you feel unwell.  
 P280 Wear protective gloves and eye protection.  
 P312 Call a POISON CENTER or doctor/physician if you feel unwell.  
 P410/412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C.

**Supplemental information:** None**2.2.2. Labelling according to 29 CFR 1910.1200 / WHMIS 2015****Hazard pictograms:****Signal word:**

Danger

**Hazard statements:**

H222 Extremely flammable aerosol.  
 H280 Contains gas under pressure; may explode if heated.  
 H315 Causes skin irritation.  
 H336 May cause drowsiness or dizziness.  
 H412 Harmful to aquatic life with long lasting effects.

**Precautionary statements:**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P211 Do not spray on an open flame or other ignition source.  
 P251 Do not pierce or burn, even after use.  
 P261 Avoid breathing vapours/spray.  
 P264 Wash hands thoroughly after handling.  
 P271 Use only outdoors or in a well-ventilated area.  
 P273 Avoid release to the environment.  
 P280 Wear protective gloves and eye protection.  
 P302/352 IF ON SKIN: Wash with plenty of soap and water.  
 P304/340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P312 Call a POISON CENTER or doctor/physician if you feel unwell.  
 P362/364 Take off contaminated clothing and wash it before reuse.  
 P403 Store in a well-ventilated place.  
 P410/412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.  
 P501 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 <sup>1</sup>	% Wt.	CAS No./ EC No.	REACH Reg. No.	CLP/GHS Classification
Distillates (petroleum), hydrotreated light*	35-45	64742-47-8 265-149-8	NA	Flam. Liq. 3, H226 (8-9%) Flam. Liq. 4, H227*** (30-31%) Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Chronic 2, H411
Naphtha (petroleum), hydrotreated light*	7-13	64742-49-0 265-151-9	NA	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Chronic 2, H411
Propane	1-5	74-98-6 200-827-9	NA	Flam. Gas 1, H220 Press. Gas (Comp.), H280 Simple Asphyxiant (US/Can.)
Butane	1-5	106-97-8 203-448-7	NA	Flam. Gas 1, H220 Press. Gas (Comp.), H280 Simple Asphyxiant (US/Can.)
Carbon dioxide	1-5	124-38-9 204-696-9	NA	Press. Gas (Comp.), H280
Methanol	0.1-0.2	67-56-1 200-659-6	01-211943 3307-44	Flam. Liq. 2, H225 Acute Tox. 3, H331/311/301 STOT SE 1, H370

Other ingredients<sup>1</sup>:

Mica	1-5	12001-26-2 310-127-6	NA	Not classified <sup>a</sup>
Aluminum	1-5	7429-90-5 231-072-3	NA	Not classified <sup>ab</sup>
Graphite	1-5	7782-42-5 231-955-3	01-211948 6977-12	Not classified <sup>a</sup>

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

\*Contains less than 0.1 % w/w Benzene. \*\*Contains less than 0.1 % w/w 1,3-Butadiene. \*\*\*Non-CLP classification.

<sup>a</sup>Substance with a workplace exposure limit. <sup>b</sup>Not classified for flammability and water-reactivity based on the results of UN tests N.1 and N.5, respectively.

<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, GHS, 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. Take off contaminated clothing and wash it before reuse. 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.

**Protection of first-aiders:** No action shall be taken involving any personal risk or without suitable training. Avoid contact with the product while providing aid to the victim. Avoid breathing vapors. See section 8 for specific recommendations on personal protective equipment.

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

Causes skin irritation. Direct contact may cause mild eye irritation. Vapor may irritate the respiratory tract and cause drowsiness, unconsciousness, headache, dizziness and other central nervous system effects.

**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 or water fog

**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:** 2 Y

**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**

Keep out of sewers, streams and waterways.

**6.3. Methods and material for containment and cleaning up**

Contain spill to a small area. Keep away from sources of ignition - No smoking. If removal of ignition sources is not possible, then flush material away with water. 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**

Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No Smoking. Vapors are heavier than air and will collect in low areas. Vapor accumulations could flash and/or explode if ignited. Observe good work practice - avoid eating, drinking and smoking in the work area while using any hydrocarbons.

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

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place.

**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 <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>
Distillates (petroleum), hydrotreated light	500	–	–	1200*	–	–	–	–
Naphtha (petroleum), hydrotreated light	500	2000	342*	1400*	500	2085	400 STEL: 500	1640 2050
Propane	1000	1800	**	–	–	–	**	–
Butane	–	–	STEL: 1000	–	600 STEL: 750	1450 1810	800	1900
Carbon dioxide	5000	9000	5000 STEL: 30000	9000 54000	5000 STEL: 15000	9150 STEL: 27400	5000 STEL: 30000	9000 54000
Methanol	200	260	200 STEL: 250	–	200 STEL: 250	266 STEL: 333	200 STEL: 250	262 328
Mica	–	20 mppcf	(resp)	3	(total) (resp)	10 0.8	(insp)	2.5
Aluminum	(total) (resp)	15 5	(resp)	1	(inhal) (resp)	10 4	–	10
Graphite	(total) (resp)	15 5	(inhal) (resp)	10 2	(inhal) (resp)	10 4	(resp)	3

\*Based on the procedure described in appendix H, "Reciprocal calculation method for Certain Refined Hydrocarbon Solvent Vapor Mixtures" of the ACGIH TLVs® and BEIs®.

\*\*Simple asphyxiant.

<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 Level (DNEL) according to Regulation (EC) No 1907/2006:****Workers**

Not available

**Predicted No Effect Concentration (PNEC) according to Regulation (EC) No 1907/2006:**

Not available

**8.2. Exposure controls****8.2.1. Engineering measures**

Use only in well-ventilated areas. 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/P).

**Protective gloves:** Chemical resistant gloves (e.g. Viton\*, neoprene, nitrile). \*DuPont's registered trademark.

**Eye and face protection:** Safety glasses

**Other:** Chesterton recommended limit: 5mg/m<sup>3</sup> oil mist

**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>	liquid	<b>Odour</b>	moderate
<b>Colour</b>	gray	<b>Odour threshold</b>	not determined
<b>Initial boiling point</b>	94°C (201°F), product only	<b>Vapour pressure @ 20°C</b>	Unknown
<b>Melting point</b>	not determined	<b>% Aromatics by weight</b>	not determined
<b>% Volatile (by volume)</b>	69.5%	<b>pH</b>	not applicable
<b>Flash point</b>	7.8°C (46°F)	<b>Relative density</b>	0.9 kg/l, product only
<b>Method</b>	PM Closed Cup, product only	<b>Weight per volume</b>	7.52 lbs/gal., product only
<b>Viscosity</b>	> 21 cSt @ 40°C, product only	<b>Coefficient (water/oil)</b>	not applicable
<b>Autoignition temperature</b>	not determined	<b>Vapour density (air=1)</b>	> 1
<b>Decomposition temperature</b>	no data available	<b>Rate of evaporation (ether=1)</b>	< 1
<b>Upper/lower flammability or explosive limits</b>	not determined	<b>Solubility in water</b>	none
<b>Flammability (solid, gas)</b>	extremely flammable (propellant)	<b>Oxidising properties</b>	not applicable
<b>Explosive properties</b>	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**

Open flames and red hot surfaces. May depolymerize at temperatures above 200°C with the production of extremely flammable butene monomers.

**10.5. Incompatible materials**

Strong oxidizers like liquid Chlorine and concentrated Oxygen.

**10.6. Hazardous decomposition products**

Carbon Monoxide, Carbon Dioxide, aldehydes 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 skin or lung allergies may be aggravated by exposure.

**Acute toxicity -****Oral:**

Substance	Test	Result
Distillates (petroleum), hydrotreated light	LD50, oral, rat	> 5000 mg/kg
Naphtha (petroleum), hydrotreated light	LD50 oral, rat	> 5000 mg/kg
Methanol	LD50 oral, rat	5628 mg/kg
Methanol	Human lethal dose	143 mg/kg

**Dermal:**

Substance	Test	Result
Distillates (petroleum), hydrotreated light	LC50 dermal, rabbit	> 2000 mg/kg
Naphtha (petroleum), hydrotreated light	LD50 dermal, rabbit	> 2000 mg/kg
Methanol	LDLo, monkey	393 mg/kg

**Inhalation:**

Vapor in high concentrations may irritate the respiratory tract and cause drowsiness, unconsciousness, headache, dizziness and other central nervous system effects.

Substance	Test	Result
Distillates (petroleum), hydrotreated light	LC50, rat, 4 hours	> 5.2 mg/l
Naphtha (petroleum), hydrotreated light	LC50, rat, 4 hours	5.61 mg/l (mist)
Naphtha (petroleum), hydrotreated light	LC50, rat, 4 hours	> 23.3 mg/l (vapor)
Methanol	LC50, rat, 4 hours	64000 ppm(V)
Butane	LC50, rat, 4 hours	30957 mg/m <sup>3</sup>
Propane	LC50, rat, 4 hours	658 mg/l

**Skin corrosion/irritation:**

Causes skin irritation.

Substance	Test	Result
Naphtha (petroleum), hydrotreated light	Skin irritation, (OECD 405), rabbit	Irritating
Distillates (petroleum), hydrotreated light	Skin irritation, rabbit	Slightly irritating / Moderately irritating

**Serious eye damage/irritation:**

Direct contact may cause mild eye irritation.

Substance	Test	Result
Naphtha (petroleum), hydrotreated light	Eye irritation, rabbit	Not irritating / Slightly irritating
Distillates (petroleum), hydrotreated light	Eye irritation, rabbit	Not irritating / Slightly irritating

**Respiratory or skin sensitisation:**

Not expected to cause sensitization.

Substance	Test	Result
Naphtha (petroleum), hydrotreated light	Skin sensitization, guinea pig	Not sensitizing
Distillates (petroleum), hydrotreated light	Skin sensitization, guinea pig	Not sensitizing
Methanol	Skin sensitization, guinea pig	Not sensitizing
Graphite	Skin sensitization (OECD 429), mouse	Not sensitizing
Aluminum	Skin sensitization, guinea pig	Not sensitizing (read-across)

**Germ cell mutagenicity:**

Distillates (petroleum), hydrotreated light, Naphtha (petroleum), hydrotreated light, Aluminum, Graphite, Methanol: 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:**

Distillates (petroleum), hydrotreated light, Naphtha (petroleum), hydrotreated light, Aluminum, Graphite, Methanol: based on available data, the classification criteria are not met.

**STOT-single exposure:**

May cause drowsiness or dizziness. Aluminum, Graphite: based on available data, the classification criteria are not met.

**STOT-repeated exposure:**

Not expected to cause organ damage from prolonged or repeated exposure, based on available data. Prolonged, excessive inhalation of Graphite and Mica dust has caused emphysema and pneumoconiosis. The Graphite and Mica in this product are not in powder form and should not present a hazard in normal use.

**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 life with long lasting effects. Naphtha (petroleum), hydrotreated light: 48 h EL50 (for daphnia) 3 mg/l, similar material.

**12.2. Persistence and degradability**

Distillates (petroleum), hydrotreated light, Propane, Butane, Naphtha (petroleum), hydrotreated light: degradation is expected in the atmospheric environment within days to weeks. Distillates (petroleum), hydrotreated light: expected to biodegrade relatively quickly. Naphtha (petroleum), hydrotreated light: expected to be readily biodegradable.

**12.3. Bioaccumulative potential**

Distillates (petroleum), hydrotreated light, Naphtha (petroleum), hydrotreated light: may bioaccumulate in fish and aquatic organisms. Propane, Butane: bioconcentration in aquatic organisms is not expected to be significant. Distillates (petroleum), hydrotreated light: Octanol/water partition coefficient (log Kow) = 2.1 – 6.5. Naphtha (petroleum), hydrotreated light: Octanol/water partition coefficient (log Kow) = 2.1 – 5, estimated.

**12.4. Mobility in soil**

Liquid. Insoluble in water. In determining environmental mobility, consider the product's physical and chemical properties (see Section 9). The solvents [Distillates (Petroleum), Hydrotreated Light, Petroleum Gas, Naphtha] will rapidly evaporate to the air if released into the environment. Naphtha (petroleum), hydrotreated light: not expected to partition to sediment and wastewater solids.

**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. Incinerate sealed containers at an appropriate facility. Check local, state and national/federal regulations and comply with the most stringent requirement.

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

<b>ADR/RID/ADN/IMDG/ICAO:</b>	UN1950
<b>TDG:</b>	UN1950
<b>US DOT:</b>	UN1950

**14.2. UN proper shipping name**

<b>ICAO:</b>	Aerosols, Flammable
<b>IMDG:</b>	Aerosols
<b>ADR/RID/ADN:</b>	Aerosols, <i>flammable</i>
<b>TDG:</b>	Aerosols, <i>flammable</i>
<b>US DOT:</b>	Aerosols, <i>flammable</i>

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

<b>ADR/RID/ADN/IMDG/ICAO:</b>	2.1
<b>TDG:</b>	2.1
<b>US DOT:</b>	2.1

**14.4. Packing group**

<b>ADR/RID/ADN/IMDG/ICAO:</b>	NOT APPLICABLE
<b>TDG:</b>	NOT APPLICABLE
<b>US DOT:</b>	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 5F, Tunnel restriction code (E), Shipped as Limited Quantity

### 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:** Directive 75/324/EEC on the approximation of the laws of the Member States relating to aerosol dispensers. Directive 94/33/EC on the protection of young people at work. Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances.

##### 15.1.2. National regulations

#### US EPA SARA TITLE III

##### 312 Hazards:

Fire

##### 313 Chemicals:

Aluminum 7429-90-5 1-5%

**TSCA:** All chemical components are listed in the TSCA inventory.

**Other national regulations:** National implementations of the EC Directives 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](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 Chemical Information System (HCIS)  
 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 1, H222	On basis of components
Skin Irrit. 2, H315	Calculation method
STOT SE 3, H336	Bridging principle "Dilution"
Aquatic Chronic 2, H411	Calculation method

**Relevant H-statements:** H220: Extremely flammable gas.  
 H222: Extremely flammable aerosol.  
 H225: Highly flammable liquid and vapour.  
 H226: Flammable liquid and vapour.  
 H280: Contains gas under pressure; may explode if heated.  
 H301: Toxic if swallowed.  
 H304: May be fatal if swallowed and enters airways.  
 H311: Toxic in contact with skin.  
 H315: Causes skin irritation.  
 H331: Toxic if inhaled.  
 H336: May cause drowsiness or dizziness.  
 H370: Causes damage to organs.  
 H411: Toxic to aquatic life with long lasting effects.

**Hazard pictogram names:** Flame, gas cylinder (non-CLP labelling) exclamation mark, environment

**Changes to the SDS in this revision:** Sections 2.1, 3, 4.2, 7.2, 8.1, 9.1, 11, 15.1.2.

**Revision date:** 3 November 2017

**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.