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:** 4 September 2007 **SDS No.** 310A-12a

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

1.1. Product identifier

277 Metal Surface Degreaser (Aerosol)

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

Petroleum base cleaner.

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

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)

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
Asp. Tox. 1, H304*
Skin Irrit. 2, H315
STOT SE 3, H336
Aquatic Chronic 2, H411

2.1.2. Classification according to 29 CFR 1910.1200 / WHMIS 2015

Aerosol 1, H222, H229
Press. Gas (Comp.), H280
Asp. Tox. 1, H304
Skin Irrit. 2, H315
STOT SE 3, H336
Aquatic Chronic 2, H411

2.1.3. Classification according to WHMIS 1988

B5: Flammable aerosols; A: Compressed gases

2.1.4. Australian statement of hazardous nature

Hazardous according to criteria of Safe Work Australia.

2.1.5. Additional information

For full text of H-statements: see SECTIONS 2.2 and 16.
*Labelling not required for aerosols containing substances or mixtures classified as presenting an aspiration hazard, under Article 23 of the CLP.

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.
	P260	Do not breathe vapours/spray.
	P262	Do not get in eyes, on skin, or on clothing.
	P264	Wash skin thoroughly after handling.
	P273	Avoid release to the environment.
	P280	Wear protective gloves.
	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.
	H304	May be fatal if swallowed and enters airways.
	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.
	P260	Do not breathe vapours/spray.
	P264	Wash skin thoroughly after handling.
	P271	Use only outdoors or in a well-ventilated area.
	P273	Avoid release to the environment.
	P280	Wear protective gloves.
	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.
	P301/310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
	P331	Do NOT induce vomiting.
	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 known

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Hazardous Ingredients[1]	% Wt.	CAS No./ EC No.	REACH Reg. No.	CLP/GHS Classification
Naphtha (petroleum), light alkylate*	95-99	64741-66-8 265-068-8	01-211947 1305-42	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Chronic 2, H411
Carbon dioxide	1-5	124-38-9 204-696-9	NA	Press. Gas (Comp.), H280

For full text of H-statements: see SECTION 16.
*Contains less than 0.1 % w/w Benzene. Alternative CAS No: 90622-56-3

[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: Remove to fresh air. If not breathing, administer artificial respiration. Contact physician immediately.

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.

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

Direct eye contact may result in eye irritation. Vapor concentrations above recommended exposure levels are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anaesthetic and may have other central nervous system effects. Causes skin irritation. Aspiration into the lungs may cause chemical pneumonitis or pulmonary oedema.

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 spray

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: NFPA Storage Level III; 16 CFR 1500.3 Extremely flammable aerosol

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.

6.4. Reference to other sections

Refer to section 13 for disposal advice.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Shake well before using. Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No Smoking. After handling, wash before eating, drinking or smoking. Vapors are heavier than air and will collect in low areas. Vapor accumulations could flash and/or explode if ignited.

7.2. Conditions for safe storage, including any incompatibilities

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C (120°F). Do not pierce or burn, even after use. 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[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
Naphtha (petroleum), light alkylate*	–	–	300*	1400*	–	–	–	–
Carbon dioxide	5000	9000	5000 STEL: 30000	9000 54000	5000 STEL: 15000	9150 27400	5000 STEL: 30000	9000 54000

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

Use only in well-ventilated areas. If exposure limits are exceeded, provide adequate explosion-proof 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. neoprene, nitrile).

Eye and face protection: Safety goggles.

Other: Impervious clothing as necessary to prevent skin contact.

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	liquid	**Odour**	mild odor
Colour	clear	**Odour threshold**	not determined
Initial boiling point	98°C (208°F)	**Vapour pressure @ 20°C**	approx. 60 mm Hg
Melting point	not determined	**% Aromatics by weight**	< 0.01%
% Volatile (by volume)	100%	**pH**	not applicable
Flash point	-6.1°C (21°F)	**Relative density**	0.7 kg/l
Method	Closed Cup	**Weight per volume**	5.8 lbs/gal.
Viscosity	1 cst @ 25°C	**Coefficient (water/oil)**	< 1
Autoignition temperature	approx. 382°C (approx. 720°F)	**Vapour density (air=1)**	> 1
Decomposition temperature	not determined	**Rate of evaporation (ether=1)**	< 1
Upper/lower flammability or explosive limits	LEL: 1.2, UEL: 9.9	**Solubility in water**	< 0.01% @ 25°C
Flammability (solid, gas)	not applicable	**Oxidising properties**	not determined
Explosive properties	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

Open flames, heat, sparks and red hot surfaces.

10.5. Incompatible materials

Strong oxidizers like liquid Chlorine and concentrated Oxygen, reactive metals

10.6. Hazardous decomposition products

Carbon Monoxide, 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 dermatitis are generally aggravated by exposure.

Acute toxicity -

Oral: Based on available data, the classification criteria are not met.

Substance	Test	Result
Naphtha (petroleum), light alkylate	LD50, rat	> 10000 mg/kg

Dermal: Based on available data, the classification criteria are not met.

Substance	Test	Result
Naphtha (petroleum), light alkylate	LD50, rabbit	> 3160 mg/kg

Inhalation: Vapor concentrations above recommended exposure levels are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anaesthetic and may have other central nervous system effects.

Substance	Test	Result
Naphtha (petroleum), light alkylate	LC50, rat, 4 h, vapor	> 21 mg/l (vapor)

Skin corrosion/irritation: Causes skin irritation.

Substance	Test	Result
Naphtha (petroleum), light alkylate	Skin irritation, rabbit	Moderately irritating (read-across)

Serious eye damage/ irritation: Direct eye contact may result in eye irritation.

Substance	Test	Result
Naphtha (petroleum), light alkylate	Eye irritation, rabbit	Mild irritation (read-across)

Respiratory or skin sensitisation:

Substance	Test	Result
Naphtha (petroleum), light alkylate	Skin sensitization, guinea pig (OECD 406)	Not sensitizing

Germ cell mutagenicity: Expected to be non-mutagenic based on data from similar materials.

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: Not expected to cause toxicity, based on data from similar materials.

STOT-single exposure: May cause drowsiness or dizziness.

STOT-repeated exposure: Not expected to cause toxicity, based on data from similar materials.

Aspiration hazard: Aspiration into the lungs may cause chemical pneumonitis or pulmonary oedema.

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. Naphtha (petroleum), light alkylate: chronic NOEC, Daphnia magna = 0.17 mg/l (read-across).

12.2. Persistence and degradability

Naphtha (petroleum), light alkylate: expected to degrade rapidly in air; expected to be inherently biodegradable. This substance is expected to be removed in a wastewater treatment facility.

12.3. Bioaccumulative potential

Not determined

12.4. Mobility in soil

Liquid. Slightly soluble in water. The hazardous ingredients will rapidly evaporate to the air if released into the environment. 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. Incinerate pressurized or sealed containers in an approved facility. 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: UN1950
TDG: UN1950
US DOT: UN1950

14.2. UN proper shipping name

ICAO:	Aerosols, Flammable
IMDG:	Aerosols
ADR/RID/ADN:	Aerosols, *flammable*
TDG:	Aerosols, *flammable*
US DOT:	Aerosols, *flammable*

14.3. Transport hazard class(es)

ADR/RID/ADN/IMDG/ICAO:	2.1
TDG:	2.1
US DOT:	2.1

14.4. Packing group

ADR/RID/ADN/IMDG/ICAO:	NOT APPLICABLE
TDG:	NOT APPLICABLE
US DOT:	NOT APPLICABLE

14.5. Environmental hazards

MARINE POLLUTANT - (NAPHTHA (PETROLEUM) LIGHT ALKYLATE)

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: May be shipped as Limited Quantities when in a metal container of 1 L or less (49 CFR 173.306(3),(i)) and in a package having a rated capacity gross weight of 30kg(66 lb.) or less (49 CFR 173.306(a)).
Single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass of 5 kg or less for solids, are not subject to any other requirements of 49 CFR subchapter C. (49 CFR 171.4 (2) Marine pollutants). ERG NO. 126

IMDG: May be shipped as Limited Quantities when in a metal container of 1 L or less (IMO IMDG Special Provision 277) and in a package having a rated capacity gross weight of 30kg(66 lb.) or less (IMO IMDG 3.4.2.1).
Marine Pollutants packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass of 5 kg or less for solids, are not subject to any other requirements of the IMDG code relevant to marine pollutants. EmS. F-D, S-U

ADR: May be shipped as Limited Quantities when in a metal container of 1 L or less (ADR 3.4.1) and in a package having a rated capacity gross weight of 30kg(66 lb.) or less (ADR 3.4.2).
Packages containing environmentally hazardous substances shall be marked with the environmentally hazardous substance mark with the exception of single and combination packagings where such single or inner packagings of such combination packagings have a net quantity of 5 L or less for liquids; or a net mass of 5 kg or less for solids(ADR 5.2.1.8.1). Classification code 5F, Tunnel restriction code (E)

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.

15.1.2. National regulations

US EPA SARA TITLE III

312 Hazards:	**313 Chemicals:**
Immediate	None
Fire	
Pressure Release	**TSCA:** All chemical components are listed in the TSCA inventory.

Other national regulations: National implementation of the EC Directive 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.

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]:

Classification	Classification procedure
Aerosol 1, H222	On basis of components
STOT SE 3, H336	Bridging principle "Dilution"
Skin Irrit. 2, H315	Calculation method
Aquatic Chronic 2, H411	Calculation method

Relevant H-statements:

EUH066: Repeated exposure may cause skin dryness or cracking.
H222: Extremely flammable aerosol.
H225: Highly flammable liquid and vapour.
H229: Pressurized container: May burst if heated.
H304: May be fatal if swallowed and enters airways.
H315: Causes skin irritation.
H336: May cause drowsiness or dizziness.
H411: Toxic to aquatic life with long lasting effects.

Hazard pictogram names: Flame, gas cylinder (non-CLP) health hazard (non-CLP) exclamation mark, environment.

Changes to the SDS in this revision: Section 1.3.

Revision date: 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.