



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: 3 July 2007

SDS No. 388A-8a

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

1.1. Product identifier

294 CSD (Aerosol)

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

Fast evaporating solvent degreaser. 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]

Aerosol 1, H222, H229
Asp. Tox. 1, H304*
Eye Irrit. 2, H319
Skin Irrit. 2, H315
Skin Sens. 1, H317
STOT SE 3, H336
Aquatic Chronic 2, H411

2.1.2. Classification according to 29 CFR 1910.1200 / WHMIS 2015

Flam. Aerosol 1, H222, H229
Compressed gas, H280
Asp. Tox. 1, H304
Eye Irrit. 2, H319
Skin Irrit. 2, H315
Skin Sens. 1, H317
STOT SE 3, H336
Aquatic Chronic 2, H411

2.1.3. Classification according to WHMIS 1988

A: Compressed gases; B5: Flammable aerosols; D2B: Toxic materials causing other effects

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.
 H319 Causes serious eye irritation.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 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.
 P280 Wear protective gloves and eye/face protection.
 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.
 H222 Extremely flammable aerosol.
 H229 Pressurized container: May burst if heated.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H319 Causes serious eye 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.
 P264B Wash skin thoroughly after handling.
 P273 Avoid release to the environment.
 P280 Wear protective gloves and eye/face protection.
 P301/310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 P331 Do NOT induce vomiting.
 P333/313 If skin irritation or rash occurs: Get medical advice/attention.
 P337/313 If eye irritation persists: Get medical advice/attention.
 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.
 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), hydrotreated light	60-70	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
Acetone	10-20	67-64-1 200-662-2	NA	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066
Carbon dioxide	3-7	124-38-9 204- 696-9	NA	Compressed gas, H280
Isopropanol	1-5	67-63-0 200-661-7	01-211945 7558-25	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
d-Limonene, food grade (Orange terpenes)	1-5	5989-27-5* 227-813-5	01-211952 9223-47	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2B, H320 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 (M-factor = 1)

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

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. If conscious, dilute stomach contents with large quantities of milk or water. Contact physician immediately.

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

Direct eye contact causes eye irritation. Excessive inhalation of vapors will irritate the eyes and respiratory tract and cause dizziness, headache and other central nervous system effects. May cause an allergic skin reaction. Prolonged or repeated skin contact may cause skin irritation and dermatitis. 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. Cardiac arrhythmia has been reported in animal studies. Epinephrine and other sympathomimetic drugs should only be used as a last resort in an immediate life threatening situation in conjunction with cardiac monitoring.

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

No special requirements.

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**

Shake well before using. 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. Utilize exposure controls and personal protection as specified in Section 8. Remove contaminated clothing and wash before reuse.

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.

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), hydrotreated light	–	–	342*	1400*	–	–	–	–
Acetone	1000	2400	250 STEL: 500	–	500 STEL: 1500	1210 STEL: 3620	500 STEL: 1000	1185 STEL: 2375
Carbon dioxide	5000	9000	5000 STEL: 30000	9000 54000	5000 STEL: 15000	9150 STEL: 27400	5000 STEL: 30000	9000 STEL: 54000
Isopropanol	400	980	200 STEL: 400	–	400 STEL: 500	999 STEL: 1250	400 STEL: 500	983 STEL: 1230
d-Limonene**	–	–	–	–	–	–	–	–

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

**American Industrial Hygiene Association (AIHA) recommended limit: 30 ppm (2230 8 hr TWA).

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 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).

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

Acetone:

Contact type	Glove material	Layer thickness	Breakthrough time*
Full	butyl rubber	0.7 mm	> 480 min.
Splash	natural rubber	0.6 mm	> 10 min.

*Determined according to EN374 standard.

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	liquid	Odour	ethereal
Colour	clear, white	Odour threshold	not determined
Initial boiling point	56°C (133°F), product only	Vapour pressure @ 20°C	not determined
Melting point	not determined	% Aromatics by weight	< 0.2%
% Volatile (by volume)	100%	pH	not applicable
Flash point	-18°C (-4°F)	Relative density	0.71 kg/l, product only
Method	PM Closed Cup, product only	Weight per volume	5.9 lbs/gal., product only
Viscosity	not determined	Coefficient (water/oil)	not applicable
Autoignition temperature	222°C (432°F)	Vapour density (air=1)	> 1
Decomposition temperature	not determined	Rate of evaporation (ether=1)	< 1
Upper/lower flammability or explosive limits	LEL: 1.1; UEL: 7	Solubility in water	insoluble
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 and red hot surfaces.

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

Substance	Test	Result
Naphtha (petroleum), hydrotreated light	LD50, rat	> 5000 mg/kg
Acetone	LD50, rat	5800 mg/kg
Isopropanol	LD50, rat	5045 mg/kg
Isopropanol	Human lethal dose	3570 mg/kg
d-Limonene, food grade	LD50, rat	≥ 4400 mg/kg

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

Substance	Test	Result
Naphtha (petroleum), hydrotreated light	LD50, rabbit	> 2000 mg/kg
Acetone	LD50, rabbit	20000 mg/kg
Isopropanol	LD50, rabbit	12800 mg/kg
d-Limonene, food grade	LD50, rabbit	> 2000 mg/kg

Inhalation: Excessive inhalation of vapors will irritate the eyes and respiratory tract and cause dizziness, headache and other central nervous system effects.

Substance	Test	Result
Naphtha (petroleum), hydrotreated light	LC50, rat, 4 h	> 5.6 mg/l (analytical, vapor)
Acetone	LC50, rat, 4 h	76 mg/l (vapor)
Isopropanol	LC50, rat, 4 h	46.5 mg/l (vapor)
d-Limonene*	RD50, mice, 10 min.	5.983 mg/l

Skin corrosion/irritation: Prolonged or repeated skin contact may cause skin irritation and dermatitis.

Substance	Test	Result
Naphtha (petroleum), hydrotreated light	Skin irritation, rabbit	Irritating
d-Limonene	Skin irritation, human, rabbit	Irritating

Serious eye damage/irritation: Direct eye contact causes eye irritation.

Substance	Test	Result
Acetone	Eye irritation, rabbit	Irritating
Isopropanol	Eye irritation, rabbit	Moderately irritating

Respiratory or skin sensitisation: May cause an allergic skin reaction. d-Limonene itself is not a skin sensitizer but some of its oxidation products are known skin sensitizers.

Substance	Test	Result
Naphtha (petroleum), hydrotreated light	Skin sensitization, guinea pig	Not sensitizing
Acetone	Skin sensitization, guinea pig	Not sensitizing
Isopropanol	Skin sensitization, guinea pig	Not sensitizing
d-Limonene	Skin sensitization, guinea pig	Sensitizing

Germ cell mutagenicity: Hazardous ingredients: 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: Naphtha (petroleum), hydrotreated light, Acetone, Isopropanol: based on available data, the classification criteria are not met.

STOT-single exposure: May cause drowsiness or dizziness.

STOT-repeated exposure: Hazardous ingredients: based on available data, the classification criteria are not met.

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.

12.2. Persistence and degradability

Naphtha (petroleum), hydrotreated light, Isopropanol, Acetone, d-Limonene: expected to be readily biodegradable. Isopropanol, Naphtha (petroleum), hydrotreated light, Orange terpenes: degradation is expected in the atmospheric environment within days to weeks. Acetone: Atmospheric half-life = 79 days (estimated).

12.3. Bioaccumulative potential

Naphtha (petroleum), hydrotreated light, d-Limonene: may bioaccumulate in fish and aquatic organisms [Octanol/water partition coefficient (log Kow): 4.23]. Isopropanol, Acetone: low potential for bioaccumulation (BCF < 100).

12.4. Mobility in soil

Liquid. Insoluble in water. In determining environmental mobility, consider the product's physical and chemical properties (see Section 9). In aquatic systems, d-Limonene may adsorb to organic matter in sediments and suspended solids. The hazardous ingredients will rapidly evaporate to the air if released into the environment.

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. 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, <i>flammable</i>
TDG:	Aerosols, <i>flammable</i>
US DOT:	Aerosols, <i>flammable</i>

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

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 94/33/EC on the protection of young people at work. 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:**

Immediate
Fire
Pressure Release

313 Chemicals:

None

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.

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
Eye Irrit. 2, H319	Calculation method
Skin Irrit. 2, H315	Calculation method
Skin Sens. 1, H317	Bridging principle "Dilution"
STOT SE 3, H336	Bridging principle "Dilution"
Aquatic Chronic 2, H411	Calculation method

Relevant H-statements: H222: Extremely flammable aerosol.
H225: Highly flammable liquid and vapour.
H226: Flammable liquid and vapour.
H229: Pressurized container: May burst if heated.
H304: May be fatal if swallowed and enters airways.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H336: May cause drowsiness or dizziness.
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: Flame, gas cylinder, health hazard, 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.