

**SAFETY DATA SHEET**

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

**Revision date:** 8 March 2016

**Initial date of issue:** 3 July 2007

**SDS No.** 267B-20

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

**1.1. Product identifier**

276 Electronic Component Cleaner (Bulk)

**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  
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] / 29 CFR 1910.1200 / WHMIS 2015 / GHS**

Flam. Liq. 2, H225  
Asp. Tox. 1, H304  
STOT SE 3, H336  
Skin Irrit. 2, H315  
Aquatic Chronic 2, H411

**2.1.2. Classification according to WHMIS 1988**

B2: Flammable liquids; D2B: Toxic materials causing other effects

**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 R-phrases: 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:**

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H336	May cause drowsiness or dizziness.
H315	Causes skin irritation.
H411	Toxic to aquatic life with long lasting effects.

<b>Precautionary statements:</b>	P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
	P233	Keep container tightly closed.
	P261	Avoid breathing vapours/spray.
	P280B	Wear protective gloves and eye/face protection.
	P303/361/353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P301/310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
	P331	Do NOT induce vomiting.
	P370/378B	In case of fire: Use CO2, dry chemical, foam or water fog to extinguish.
	P391	Collect spillage.
	P403	Store in a well-ventilated place. Keep container tightly closed.

**Supplemental information:** None

### 2.3. Other hazards

None known

## 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
Naphtha (petroleum), light alkylate*	85-95	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
Isopropanol	5-10	67-63-0 200-661-7	01-211945 7558-25	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336

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

\*Contains less than 0.1 % w/w Benzene. Alternative CAS No. 90622-56-3.

<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 [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**

None

**5.3. Advice for firefighters**

Cool exposed containers with water. Recommend Firefighters wear self-contained breathing apparatus.

**Flammability Classification:** –

**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. Refer to section 13 for disposal advice.

**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**

Keep container closed when not in use. Ground/bond container and receiving equipment. Use non-sparking tools. Take precautionary measures against static discharge. 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**

Store in a cool, dry and well-ventilated area. Keep container tightly closed.

**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>
Naphtha (petroleum), light alkylate	–	–	300*	1400*	–	–	–	–
Isopropanol	400	980	200	–	400	999	400	983
			STEL: 400		STEL: 500	STEL: 1250	STEL: 500	1230

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

<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].

**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/P).

**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**

<b>Physical state</b>	liquid	<b>Odour</b>	mild odor
<b>Colour</b>	clear	<b>Odour threshold</b>	not determined
<b>Initial boiling point</b>	98°C (208°F)	<b>Vapour pressure @ 20°C</b>	approx. 60 mm Hg
<b>Melting point</b>	not determined	<b>% Aromatics by weight</b>	< 0.01%
<b>% Volatile (by volume)</b>	100%	<b>pH</b>	not applicable
<b>Flash point</b>	-6.1°C (21°F)	<b>Relative density</b>	0.7 kg/l
<b>Method</b>	Closed Cup	<b>Weight per volume</b>	5.8 lbs/gal.
<b>Viscosity</b>	1 cst @ 25°C	<b>Coefficient (water/oil)</b>	< 1
<b>Autoignition temperature</b>	approx. 382°C (approx. 720°F)	<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>	slightly soluble
<b>Flammability (solid, gas)</b>	not applicable	<b>Oxidising properties</b>	not applicable
<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**

Open flames, heat, sparks and red hot surfaces.

**10.5. Incompatible materials**

Strong oxidizers like liquid Chlorine and concentrated Oxygen.

**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 on components, the classification criteria are not met.

Substance	Test	Result
Naphtha (petroleum), light alkylate	LD50, rat	> 10000 mg/kg
Isopropanol	LD50, rat	5840 mg/kg
Isopropanol	Human lethal dose	3570 mg/kg

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

Substance	Test	Result
Naphtha (petroleum), light alkylate	LD50, rabbit	> 3160 mg/kg
Isopropanol	LD50, rabbit	13900 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	> 21 mg/l (vapor)
Isopropanol	LC50, rat, 6 h	> 25 mg/l (vapor)

**Skin corrosion/irritation:** Causes skin irritation.

Substance	Test	Result
Naphtha (petroleum), light alkylate	Skin irritation, rabbit	Moderately irritating
Isopropanol	Skin irritation, rabbit	Not irritating

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

Substance	Test	Result
Naphtha (petroleum), light alkylate	Eye irritation, rabbit	Mild irritation
Isopropanol	Eye irritation, rabbit	Moderate irritation

**Respiratory or skin sensitisation:**

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

**Germ cell mutagenicity:** Naphtha (petroleum), light alkylate: not expected to be a germ cell mutagen, based on data from similar materials. Isopropanol: 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), light alkylate: not expected to be a reproductive toxicant, based on data from similar materials. Isopropanol: based on available data, the classification criteria are not met.

**STOT-single exposure:** May cause drowsiness or dizziness.

**STOT-repeated exposure:** Naphtha (petroleum), light alkylate: not expected to cause organ damage from prolonged or repeated exposure, based on data from similar materials. Isopropanol: based on available data, the classification criteria are not met.

**Aspiration hazard:** May be fatal if swallowed and enters airways.

**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. Isopropanol: readily biodegradable.

**12.3. Bioaccumulative potential**

Isopropanol: low potential for bioaccumulation.

**12.4. Mobility in soil**

Liquid. Slightly soluble in water. In determining environmental mobility, consider the product's physical and chemical properties (see Section 9). The hazardous ingredients will rapidly evaporate to the air if released into the environment. Isopropanol: expected to have very high mobility in soils.

**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 in an approved area. Material is suitable for fuels blending or incineration. 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**

<b>ADR/RID/ADN/IMDG/ICAO:</b>	UN1993
<b>TDG:</b>	UN1993
<b>US DOT:</b>	UN1993

**14.2. UN proper shipping name**

<b>ADR/RID/ADN/IMDG/ICAO:</b>	FLAMMABLE LIQUID, N.O.S. (CONTAINS NAPHTHA ISOPROPYL ALCOHOL)
<b>TDG:</b>	FLAMMABLE LIQUID, N.O.S. (CONTAINS NAPHTHA ISOPROPYL ALCOHOL)
<b>US DOT:</b>	FLAMMABLE LIQUID, N.O.S. (CONTAINS NAPHTHA ISOPROPYL ALCOHOL)

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

<b>ADR/RID/ADN/IMDG/ICAO:</b>	3
<b>TDG:</b>	3
<b>US DOT:</b>	3

**14.4. Packing group**

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

**14.5. Environmental hazards**

MARINE POLLUTANT

**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:** ERG NO. 128

May be shipped as Limited Quantities in packaging having a rated capacity gross weight of 66 lb. or less and in inner packages not over 1 Liter (49 CFR 173.150(b,2)).

**IMDG:** EmS F-E, S-E

**ADR:** Classification code F1, Tunnel restriction code (D/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 2012/18/EU on the control of major-accident hazards involving dangerous substances (Petroleum products, qualifying quantities: 2 500 t, 25 000 t).

#### 15.1.2. National regulations

#### US EPA SARA TITLE III

##### 312 Hazards:

Immediate  
Fire

##### 313 Chemicals:

None

**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  
 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)  
 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)  
 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)  
 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
Flam. Liq. 2, H225	On basis of test data
Asp. Tox. 1, H304	Bridging principle "Dilution"
STOT SE 3, H336	Bridging principle "Dilution"
Skin Irrit. 2, H315	Calculation method
Aquatic Chronic 2, H411	Calculation method

**Relevant H-statements:** H225: Highly flammable liquid and vapour.  
H304: May be fatal if swallowed and enters airways.  
H315: Causes skin irritation.  
H319: Causes serious eye irritation.  
H336: May cause drowsiness or dizziness.  
H411: Toxic to aquatic life with long lasting effects.

**Hazard pictogram names:** Flame, Health hazard, exclamation mark, environment

**Changes to the SDS in this revision:** Sections 2.1, 2.2, 3, 4.1, 4.2, 7.1, 7.2, 11, 12.1, 15.1, 16.

**Revision date:** 8 March 2016

**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.