## 1.1. Product identifier

276 Electronic Component Cleaner (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

**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)

## 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

- Flam. Aerosol 1, H222
- 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; 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:  

- Flame
- Exclamation mark
- Fish
- Wheel

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:  

- Flame
- Exclamation mark
- Fish
- Wheel

Signal word: Danger

Hazard statements:
- H222 Extremely flammable aerosol.
- H304 May be fatal if swallowed and enters airways.
- H280 Contains gas under pressure; may explode 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.
- P271 Use only outdoors or in a well-ventilated area.
- P273 Avoid release to the environment.
- P280 Wear protective gloves.
- P301/310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- P331 Do NOT induce vomiting.
- 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.
- 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

<table>
<thead>
<tr>
<th>Hazardous Ingredients¹</th>
<th>% Wt.</th>
<th>CAS No./ EC No.</th>
<th>REACH Reg. No.</th>
<th>CLP/GHS Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon dioxide</td>
<td>1-5</td>
<td>124-38-9 / 204-696-9</td>
<td>NA</td>
<td>Press. Gas (Comp.), H280</td>
</tr>
</tbody>
</table>

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

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


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

Causes skin irritation. 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. 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

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>OSHA PEL¹ ppm</th>
<th>ACGIH TLV² ppm</th>
<th>UK WEL³ ppm</th>
<th>AUSTRALIA ES⁴ ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mg/m³</td>
<td>mg/m³</td>
<td>mg/m³</td>
<td></td>
</tr>
<tr>
<td>Naphtha (petroleum), light alkylate*</td>
<td>–</td>
<td>300*</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Isopropanol</td>
<td>400</td>
<td>980</td>
<td>200</td>
<td>400</td>
</tr>
<tr>
<td></td>
<td>400</td>
<td>–</td>
<td>999</td>
<td>400</td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>5000</td>
<td>9000</td>
<td>5000</td>
<td>5000</td>
</tr>
<tr>
<td></td>
<td>5000</td>
<td>9000</td>
<td>5000</td>
<td>5000</td>
</tr>
<tr>
<td></td>
<td>3000</td>
<td>54000</td>
<td>15000</td>
<td>3000</td>
</tr>
</tbody>
</table>

*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

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

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 on components, the classification criteria are not met.

<table>
<thead>
<tr>
<th>Substance</th>
<th>Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphtha (petroleum), light alkylate</td>
<td>LD50, rat</td>
<td>&gt; 10000 mg/kg</td>
</tr>
<tr>
<td>Isopropanol</td>
<td>LD50, rat</td>
<td>5840 mg/kg</td>
</tr>
<tr>
<td>Isopropanol</td>
<td>Human lethal dose</td>
<td>3570 mg/kg</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Substance</th>
<th>Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphtha (petroleum), light alkylate</td>
<td>LD50, rabbit</td>
<td>&gt; 3160 mg/kg</td>
</tr>
<tr>
<td>Isopropanol</td>
<td>LD50, rabbit</td>
<td>13900 mg/kg</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Substance</th>
<th>Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphtha (petroleum), light alkylate</td>
<td>LC50, rat, 4 h, vapor</td>
<td>&gt; 21 mg/l (vapor)</td>
</tr>
<tr>
<td>Isopropanol</td>
<td>LC50, rat, 6 h, vapor</td>
<td>&gt; 25 mg/l (vapor)</td>
</tr>
</tbody>
</table>
Skin corrosion/irritation: Causes skin irritation.

<table>
<thead>
<tr>
<th>Substance</th>
<th>Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphtha (petroleum), light alkylate</td>
<td>Skin irritation, rabbit</td>
<td>Moderately irritating</td>
</tr>
<tr>
<td>Isopropanol</td>
<td>Skin irritation, rabbit</td>
<td>Not irritating (0)</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Substance</th>
<th>Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphtha (petroleum), light alkylate</td>
<td>Eye irritation, rabbit</td>
<td>Mild irritation (read-across)</td>
</tr>
<tr>
<td>Isopropanol</td>
<td>Eye irritation, rabbit</td>
<td>Moderately irritating</td>
</tr>
</tbody>
</table>

Respiratory or skin sensitisation:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphtha (petroleum), light alkylate</td>
<td>Skin sensitization, guinea pig (OECD 406)</td>
<td>Not sensitizing</td>
</tr>
<tr>
<td>Isopropanol</td>
<td>Skin sensitization, guinea pig (OECD 406)</td>
<td>Not sensitizing</td>
</tr>
</tbody>
</table>

Germ cell mutagenicity: Isopropanol: based on available data, the classification criteria are not met. Naphtha (petroleum), light alkylate: 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: Isopropanol: based on available data, the classification criteria are not met. Naphtha (petroleum), light alkylate: not expected to cause toxicity, based on data from similar materials.

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

STOT-repeated exposure: Isopropanol: based on available data, the classification criteria are not met. Naphtha (petroleum), light alkylate: 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. Isopropanol: readily biodegradable.

12.3. Bioaccumulative potential
Isopropanol: low potential for bioaccumulation.

12.4. Mobility in soil
Liquid. Slightly soluble in water. The hazardous ingredients will rapidly evaporate to the air if released into the environment. Isopropanol: expected to have very high mobility in soils. 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

<table>
<thead>
<tr>
<th>ADR/RID/ADN/IMDG/ICAO</th>
<th>TDG</th>
<th>US DOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN1950</td>
<td>UN1950</td>
<td>UN1950</td>
</tr>
</tbody>
</table>

14.2. UN proper shipping name

<table>
<thead>
<tr>
<th>ICAO</th>
<th>ADR/RID/ADN</th>
<th>TDG</th>
<th>US DOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerosols, Flammable</td>
<td>Aerosols, flammable</td>
<td>Aerosols, flammable</td>
<td>Aerosols, flammable</td>
</tr>
</tbody>
</table>

14.3. Transport hazard class(es)

<table>
<thead>
<tr>
<th>ADR/RID/ADN/IMDG/ICAO</th>
<th>TDG</th>
<th>US DOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>2.1</td>
<td>2.1</td>
</tr>
</tbody>
</table>

14.4. Packing group

<table>
<thead>
<tr>
<th>ADR/RID/ADN/IMDG/ICAO</th>
<th>TDG</th>
<th>US DOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOT APPLICABLE</td>
<td>2.1</td>
<td>2.1</td>
</tr>
</tbody>
</table>

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


15.1.2. National regulations

US EPA SARA TITLE III

312 Hazards: None

313 Chemicals: 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]:

<table>
<thead>
<tr>
<th>Classification</th>
<th>Classification procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerosol 1, H222</td>
<td>On basis of components</td>
</tr>
<tr>
<td>Skin Irrit. 2, H315</td>
<td>Calculation method</td>
</tr>
<tr>
<td>STOT SE 3, H336</td>
<td>Bridging principle “Dilution”</td>
</tr>
<tr>
<td>Aquatic Chronic 2, H411</td>
<td>Calculation method</td>
</tr>
</tbody>
</table>

Relevant H-statements:
- 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.
- H319: Causes serious eye 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.
<table>
<thead>
<tr>
<th>Changes to the SDS in this revision:</th>
<th>Section 1.3.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revision date:</td>
<td>26 April 2018</td>
</tr>
<tr>
<td>Further information:</td>
<td>None</td>
</tr>
</tbody>
</table>

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.