

## SAFETY DATA SHEET

in accordance with 2020/878/EU (REACH, Annex II) 29 CFR 1910.1200, WHMIS 2015 and Safe Work Australia

**Revision date:** 5 December 2023      **Date of previous issue:** 8 January 2023      **SDS No.** 173A-23

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

#### 1.1. Product identifier

715 Spraflex® (Aerosol)

**Unique Formula Identifier (UFI):** 4AQV-VXPU-PVC0-7CSX

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

**Relevant identified uses:** Petroleum base lubricant for chain drives, open gears and wire ropes.

**Uses advised against:** No data available

**Reason why uses advised against:** Not applicable

#### 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): [ProductSDSs@chesterton.com](mailto:ProductSDSs@chesterton.com)  
E-mail: [customer.service@chesterton.com](mailto: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] / Safe Work Australia

Aerosol, Category 1, H222, H229  
Skin irritation, Category 2, H315  
Specific target organ toxicity – single exposure, Category 3, H336

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

Flammable aerosol, Category 1, H222  
Compressed gas, H280  
Skin irritation, Category 2, H315  
Specific target organ toxicity – single exposure, Category 3, H336

##### 2.1.3. 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] / Safe Work Australia

**Hazard pictograms:**



<b>Signal word:</b>	Danger	
<b>Hazard statements:</b>	H222	Extremely flammable aerosol.
	H229	Pressurized container: May burst if heated.
	H315	Causes skin irritation.
	H336	May cause drowsiness or dizziness.
<b>Precautionary statements:</b>	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.
	P280	Wear protective gloves.
	P312	Call a POISON CENTER or doctor if you feel unwell.
	P410/412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

**Supplemental information:** None

### 2.2.2. Labelling according to 29 CFR 1910.1200 / WHMIS 2015

**Hazard pictograms:**



<b>Signal word:</b>	Danger	
<b>Hazard statements:</b>	H222	Extremely flammable aerosol.
	H280	Contains gas under pressure; may explode if heated.
	H315	Causes skin irritation.
	H336	May cause drowsiness or dizziness.
<b>Precautionary statements:</b>	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.
	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 if you feel unwell.
	P332/313	If skin irritation occurs: Get medical advice/attention.
	P362/364	Take off contaminated clothing and wash it before reuse.
	P403	Store in a well-ventilated place.
	P410/412U	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 <sup>1</sup>	% Wt.	CAS No./ EC No.	REACH Reg. No.	CLP/GHS Classification	SCL, M-factor, ATE
Distillates (petroleum), hydrotreated light	15-24	64742-47-8 265-149-8	NA	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Chronic 3, H412	ATE (oral): > 5,000 mg/kg ATE (dermal): > 2,000 ATE (inhalation, mist): > 5 mg/l
Propane	7-13	74-98-6 200-827-9	NA	Flam. Gas 1, H220 Press. Gas (Comp.), H280	ATE (inhalation, vapour): 658 mg/l

Butane*	5-10	106-97-8 203-448-7	NA	Flam. Gas 1, H220 Press. Gas (Comp.), H280	ATE (inhalation, vapour): 30.957mg/l
m-Xylene	1-5	108-38-3 203-576-3	NA	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Acute Tox. 4, H332, H312 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 3, H412	ATE (oral): 3,523 mg/kg ATE (dermal): > 4,200 mg/kg ATE (inhalation, vapour): 27.124 mg/l
Morpholine	0.1-0.9	110-91-8 203-815-1	NA	Flam. Liq. 3, H226 Acute Tox. 3, H311, H331 Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318	ATE (oral): 1,910 mg/kg ATE (dermal): 500 ATE (inhalation, vapour): 8 mg/l
Other ingredients <sup>1</sup> :					
Distillates (petroleum), hydrotreated naphthenic**	50-60	64742-52-5 265-155-0	NA	Not classified	ATE (oral): > 5,000 mg/kg ATE (dermal): > 2,000 ATE (inhalation, mist): > 5 mg/l
For full text of H-statements: see SECTION 16. *Contains less than 0.1 % w/w 1,3-Butadiene. **Contains less than 3 % DMSO extract as measured by IP 346.					
<sup>1</sup> Classified according to: <ul style="list-style-type: none"> <li>• 29 CFR 1910.1200, 1915, 1916, 1917, Mass. Right-to-Know Law (ch. 40, M.G.L..O. 111F)</li> <li>• 1272/2008/EC, GHS, REACH</li> <li>• WHMIS 2015</li> <li>• Safe Work Australia</li> </ul>					

**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:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 10 minutes. 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 vapours. See section 8.2.2 for recommendations on personal protective equipment.

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

Causes skin irritation. Direct eye contact will cause eye irritation. Excessive inhalation of vapors will irritate the eyes and respiratory tract and cause dizziness, headache 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 spray

**Unsuitable extinguishing media:** High volume water jet

**5.2. Special hazards arising from the substance or mixture**

**Hazardous combustion products:** Carbon Monoxide, aldehydes, Hydrogen Sulfide and other toxic fumes.

**Other hazards:** Water may cause frothing. 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.

**Australian 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. Keep away from sources of ignition - No smoking. If removal of ignition sources is not possible, then flush material away with water.

**6.2. Environmental Precautions**

Contain spill to a small area. Keep out of sewers, streams and waterways.

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

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. Do not breathe vapour/spray. Utilize exposure controls and personal protection as specified in Section 8. Vapors are heavier than air and will collect in low areas. Wash before eating, drinking or smoking. If product is heated, use adequate ventilation.

**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 <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	N/A	N/A	212 *	1200 *	N/A	N/A	N/A	N/A
Propane	1000	1800	N/A	N/A	N/A	N/A	N/A	N/A
Butane	N/A	N/A	1,000 (STEL)	N/A	600 STEL: 750	1,450 1,810	800	1,900
m-Xylene **	100	435	100 STEL: 150	434	50 STEL: 100	220 441	80 STEL: 150	350 STEL: 655
Morpholine ***	20	70	20	(skin)	10 (skin) STEL: 20	36 72	20 (skin)	71
Oil mist, mineral	N/A	5	(inhal.)	5	N/A	N/A	N/A	5

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

\*\* European Union Occupational Exposure Limit Value: 50 ppm, 221 mg/m<sup>3</sup> (8-hr TWA) 100 ppm, 442 mg/m<sup>3</sup> (15 min)

\*\*\* European Union Occupational Exposure Limit Value: 10 ppm, 36 mg/m<sup>3</sup> (8-hr TWA) 20 ppm, 72 mg/m<sup>3</sup> (15 min)

<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> Safe Work Australia, Workplace Exposure Standards for Airborne Contaminants

**Biological limit values**

Xylene :

Control parameter	Biological specimen	Sampling Time	Limit value	Source	Notes
Methylhippuric acids	Urine	End of shift	1.5 g/g creatinine	ACGIH	–

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

Substance	Route of exposure	Potential health effects	DNEL
m-Xylene	Inhalation	Chronic effects, local	221 mg/m <sup>3</sup> (GESTIS)
	Inhalation	Chronic effects, systemic	221 mg/m <sup>3</sup> (GESTIS)
Morpholine	Inhalation	Chronic effects, local	36 mg/m <sup>3</sup> (GESTIS)
Distillates (petroleum), hydrotreated naphthenic	Inhalation	Chronic effects, systemic	5.58 mg/m <sup>3</sup> (GESTIS)
	Inhalation	Chronic effects, local	2.73 mg/m <sup>3</sup> (GESTIS)

**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:** Impervious clothing as necessary for repetitive, prolonged 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>	high viscosity liquid	<b>pH</b>	not applicable
<b>Colour</b>	black	<b>Kinematic viscosity</b>	≥ 57.87 cSt @ 40°C @ 40°C @ 40°C (calculated, product only)
<b>Odour</b>	strong petroleum odor	<b>Solubility in water</b>	insoluble
<b>Odour threshold</b>	not determined	<b>Partition coefficient n-octanol/water (log value)</b>	not applicable
<b>Boiling point or range</b>	139°C (282°F), product only	<b>Vapour pressure @ 20°C</b>	not determined
<b>Melting point/freezing point</b>	not determined	<b>Density and/or relative density</b>	0.917 kg/l
<b>% Volatile (by volume)</b>	35%, product only	<b>Weight per volume</b>	7.63 lbs/gal.
<b>Flammability</b>	ignitable	<b>Vapour density (air=1)</b>	> 1
<b>Lower/upper flammability or explosion limits</b>	LEL 1.1%; UEL 9.0%	<b>Rate of evaporation (ether=1)</b>	< 1
<b>Flash point</b>	41°C (105°F), product only	<b>% Aromatics by weight</b>	< 6
<b>Method</b>	PM Closed Cup	<b>Particle characteristics</b>	not applicable
<b>Autoignition temperature</b>	not determined	<b>Explosive properties</b>	not determined
<b>Decomposition temperature</b>	not determined	<b>Oxidising 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, Hydrogen Sulfide and other toxic fumes.

**SECTION 11: TOXICOLOGICAL INFORMATION****11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 / GHS**

**Primary route of exposure under normal use:** Inhalation, skin and eye contact. Personnel with dermatitis are generally aggravated by exposure.

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

Based on available data on components, the classification criteria are not met. ATE-mix > 5000 mg/kg.

Substance	Test	Result
Distillates (petroleum), hydrotreated light	LD50, rat	> 5,000 mg/kg
m-Xylene	LD50, rat	3,523 mg/kg
Distillates (petroleum), hydrotreated naphthenic	LD50, rat	> 5,000 mg/kg
Morpholine	LD50, rat	1,910 mg/kg

**Dermal:**

Based on available data on components, the classification criteria are not met. ATE-mix = 19.264 mg/kg.

Substance	Test	Result
Distillates (petroleum), hydrotreated light	LD50, rabbit	> 2,000 mg/kg
m-Xylene	LD50, rabbit	> 4,200 mg/kg
Distillates (petroleum), hydrotreated naphthenic	LD50, rabbit	> 2,000 mg/kg, estimated
Morpholine	LD50, rabbit	500 mg/kg

**Inhalation:**

ATE-mix = 217.8 mg/l (vapour). Excessive inhalation of vapors will irritate the eyes and respiratory tract and cause dizziness, headache and other central nervous system effects.

Substance	Test	Result
Distillates (petroleum), hydrotreated light	LC50, rat, 4 h	> 5.28 mg/l (vapour)
Propane / Butane	LC50, rat, 4 h	658 mg/l
m-Xylene	LC50, rat, 4 h	27.124 mg/l (vapour)
Morpholine	LC50, rat, 4 h	8 mg/l (vapour)

**Skin corrosion/irritation:**

Causes skin irritation.

Substance	Test	Result
Distillates (petroleum), hydrotreated light	Skin irritation, rabbit	Not irritating Slightly irritating Moderate irritation

**Serious eye damage/irritation:**

Direct eye contact will cause eye irritation.

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

**Respiratory or skin sensitisation:**

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

Substance	Test	Result
Distillates (petroleum), hydrotreated light	Skin sensitization, guinea pig	Not sensitizing
Xylene	Skin sensitization, mouse	Not sensitizing

**Germ cell mutagenicity:**

Distillates (petroleum), hydrotreated light, m-Xylene: based on available data, the classification criteria are not met.

**Carcinogenicity:**

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 the European Chemicals Agency (ECHA).

**Reproductive toxicity:**

Distillates (petroleum), hydrotreated light, m-Xylene, based on available data, the classification criteria are not met.

**STOT – single exposure:**

May cause drowsiness or dizziness.

**STOT – repeated exposure:**

Distillates (petroleum), hydrotreated light, m-Xylene: based on available data, the classification criteria are not met.

**Aspiration hazard:**

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

**11.2. Information on other hazards**

None

**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**

Oil products, improperly released to the environment, can cause ground and water pollution.

**12.2. Persistence and degradability**

m-Xylene, Distillates (petroleum), hydrotreated light, Propane, Butane: degradation is expected in the atmospheric environment within days to weeks. m-Xylene: readily biodegradable. Distillates (petroleum), hydrotreated light, Distillates (petroleum), hydrotreated naphthenic: inherently biodegradable.

**12.3. Bioaccumulative potential**

m-Xylene: low potential for bioaccumulation. Distillates (petroleum), hydrotreated light: Octanol/water partition coefficient (log Kow) = 2.1-5 (estimated). Distillates (petroleum), hydrotreated naphthenic: some components may bioaccumulate in fish and aquatic organisms.

**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 [m-Xylene, Distillates (Petroleum), Hydrotreated Light] will rapidly evaporate to the air if released into the environment. m-Xylene: expected to have moderate mobility in soil.

**12.5. Results of PBT and vPvB assessment**

Not available

**12.6. Endocrine disrupting properties**

No information available

**12.7. Other adverse effects**

None known

**SECTION 13: DISPOSAL CONSIDERATIONS****13.1. Waste treatment methods**

Incinerate absorbed material with a properly licensed facility. Keep out of sewers, streams and waterways. Unused or spent product is amenable to incineration or fuels blending. 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 or ID number**

**ADG/ADR/RID/ADN/IMDG/ICAO:** UN1950  
**TDG:** UN1950  
**US DOT:** UN1950

**14.2. UN proper shipping name**

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

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

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

**14.4. Packing group**

**ADG/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. Maritime transport in bulk according to IMO instruments**

NOT APPLICABLE

**14.8. Other information**

**US DOT:** Shipped as Limited Quantity in packaging having a rated capacity gross weight of 66 lb. or less (49 CFR 173.306(a),(3),(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  
**ADG HAZCHEM CODE:** N/A **HIN:** (1)

**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 2012/18/EU on the control of major-accident hazards involving dangerous substances (hazard category P3a, Flammable Aerosols; qualifying quantities: 150 t (net), 500 t (net)).

**15.1.2. National regulations****US EPA SARA TITLE III****312 Hazards:****Chemicals subject to reporting requirements of Section 313 of EPCRA and of 40 CFR 372:**

Flammable aerosol	m-Xylene	108-38-3	1-5%
Gases under pressure			
Skin irritation			
Specific target organ toxicity – single exposure			

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:** ADG: Australian Dangerous Goods Code  
 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  
 SCL: Specific Concentration Limit  
 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] / GHS:**

Classification	Classification procedure
Aerosol 1, H222, H229	On basis of components and packaging
Skin Irrit. 2, H315	Calculation method
STOT SE 3, H336	Bridging principle "Dilution"

**Relevant H-statements:**

- H220: Extremely flammable gas.
- H226: Flammable liquid and vapour.
- H280: Contains gas under pressure; may explode if heated.
- H302: Harmful if swallowed.
- H304: May be fatal if swallowed and enters airways.
- H311: Toxic in contact with skin.
- H312: Harmful in contact with skin.
- H314: Causes severe skin burns and eye damage.
- H315: Causes skin irritation.
- H318: Causes serious eye damage.
- H319: Causes serious eye irritation.
- H331: Toxic if inhaled.
- H332: Harmful if inhaled.
- H335: May cause respiratory irritation.
- H336: May cause drowsiness or dizziness.
- H412: Harmful to aquatic life with long lasting effects.

**Hazard pictogram names:** Flame, exclamation mark

**Further information:** None

**Date of last revision:** 5 December 2023

**Changes to the SDS in this revision:** Section 1.1.

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.