



SAFETY DATA SHEET

in accordance with REACH (1907/2006/EC, as amended by 2020/878/EU) and Safe Work Australia

Revision date: 31 July 2023

Date of previous issue: 20 April 2022

SDS No. 480-1a

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

1.1. Product identifier

638 EMG 46 # 2 Electric Motor Grease

Unique Formula Identifier (UFI): Not available

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

Relevant identified uses: Synthetic base oil lubricating grease. Superior multi-purpose grease for heavy loads, high heat and corrosive environments.

Uses advised against: No information 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
E-mail (SDS questions): ProductSDSs@chesterton.com
E-mail: customer.service@chesterton.com

Supplier:

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

This product does not meet the criteria for classification in any hazard class according to Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, 29 CFR 1910.1200, WHMIS 2015, Safe Work Australia and GHS.

2.1.2. Additional information

None

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP] / Safe Work Australia

Hazard pictograms: None

Signal word: None

Hazard statements: None

Precautionary statements: None

Supplemental information: EUH208 Contains Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts, Sulfonic acids, petroleum, calcium salts and Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts. May produce an allergic reaction.
EUH210 Safety data sheet available on request.

2.3. Other hazards

None

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.2. Mixtures**

Hazardous Ingredients ¹	% Wt.	CAS No./ EC No.	REACH Reg. No.	CLP/GHS Classification	SCL, M-factor, ATE
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	1 - 5	68584-23-6 271-529-4	NA	Skin Sens. 1B, H317	ATE (oral): > 5000 mg/kg ATE (dermal): > 5000 mg/kg ATE (inhalation, mist): > 1.9 mg/l
Calcium dodecylbenzenesulphonate	1 - < 3	26264-06-2 247-557-8	NA	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 4, H413	ATE (oral): 1300 mg/kg ATE (dermal): > 5000 mg/kg
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	1 - 2	68411-46-1 270-128-1	NA	Repr. 2, H361f Aquatic Chronic 3, H412	ATE (oral): > 2000 mg/kg ATE (dermal): > 2000 mg/kg
Sulfonic acids, petroleum, calcium salts	1 - 2	61789-86-4 263-093-9	NA	Skin Sens. 1B, H317	ATE (oral): > 5000 mg/kg ATE (dermal): > 5000 mg/kg ATE (inhalation, mist): > 1.9 mg/l
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	0.1 - <1	70024-69-0 274-263-7	NA	Skin Sens. 1B, H317	ATE (oral): > 5000 mg/kg ATE (dermal): > 5000 mg/kg ATE (inhalation, mist): > 1.9 mg/l
Other ingredients:					
Calcium carbonate	10 - 20	471-34-1 207-439-9	NA	Not classified**	ATE (oral): 6450 mg/kg
Baseoil – unspecified*	10 - <20	64742-70-7/ 265-174-4 64742-65-0/ 265-169-7	NA	Not classified**	ATE (oral): > 5000 mg/kg ATE (dermal): > 2000 mg/kg ATE (inhalation, mist): > 5.53 mg/l

For full text of H-statements: see SECTION 16. *Contains less than 3 % DMSO extract as measured by IP 346.

**Substance with a workplace exposure limit.

¹ Classified according to: 1272/2008/EC, REACH, Safe Work Australia, GHS**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:** Rinse cautiously with water. Remove contact lenses, if present and easy to do. Continue rinsing. Contact physician if irritation persists.**Ingestion:** Do not induce vomiting. Contact physician.**Protection of first-aiders:** Avoid contact with the product while providing aid to the victim. See section 8.2.2 for recommendations on personal protective equipment.**4.2. Most important symptoms and effects, both acute and delayed**

May cause mild eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

High velocity injection under the skin may leave a bloodless puncture wound subject to infection, disfigurement, lack of blood and may require amputation. Immediate treatment by a surgical specialist is recommended.

SECTION 5: FIREFIGHTING MEASURES**5.1. Extinguishing media**

Suitable extinguishing media: Water spray, alcohol-resistant foam, dry chemical, or carbon dioxide

Unsuitable extinguishing media: High volume water jet

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products: Carbon Monoxide, Carbon Dioxide, oxides of Nitrogen and Sulfur and other toxic fumes.

Other hazards: Do not allow runoff from firefighting to enter drains or water courses.

5.3. Advice for firefighters

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

Australian HAZCHEM Emergency Action Code: 3 Z

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures**

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. 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**

Utilize exposure controls and personal protection as specified in Section 8. Wash before eating, drinking or smoking. Injection into the body without immediate medical treatment may cause loss of affected part of the body.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool, dry area. Keep container closed when not in 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	ACGIH TLV ¹		UK WEL ²		AUSTRALIA ES ³	
	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	N/A	N/A	N/A	N/A	N/A	N/A
Calcium dodecylbenzenesulphonate	N/A	N/A	N/A	N/A	N/A	N/A
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	N/A	N/A	N/A	N/A	N/A	N/A
Sulfonic acids, petroleum, calcium salts	N/A	N/A	N/A	N/A	N/A	N/A
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	N/A	N/A	N/A	N/A	N/A	N/A
Calcium carbonate	(inhal.) (resp.)	10 * 3	(inhal.) (resp.)	10 4	(inhal.)	10
Baseoil – unspecified	N/A	5	N/A	N/A	N/A	5

* Particles Not Otherwise Specified (PNOS)

¹ American Conference of Governmental Industrial Hygienists threshold limit values

² EH40 Workplace exposure limits, Health & Safety Executive

³ Safe Work Australia, Workplace Exposure Standards for Airborne Contaminants

Biological limit values

No biological exposure limits noted for the ingredient(s).

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

Workers

Substance	Route of exposure	Potential health effects	DNEL
Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil – unspecified	Inhalation	Chronic effects, local	5.6 mg/m ³
		Chronic effects, systemic	2.7 mg/m ³
	Dermal	Chronic effects, systemic	1 mg/kg bw/day
Calcium dodecylbenzenesulphonate	Inhalation	Acute effects, local	52mg/m ³
		Acute effects, systemic	52 mg/m ³
		Chronic effects, local	52 mg/m ³
	Dermal	Chronic effects, systemic	52 mg/m ³
		Acute effects, local	1.57 mg/cm ²
		Acute effects, systemic	80 mg/kg bw/day
		Chronic effects, local	1.57 mg/cm ²
		Chronic effects, systemic	57.2 mg/kg bw/day
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	Inhalation	Chronic effects, systemic	4.37 mg/m ³
		Dermal	Chronic effects, systemic
Sulfonic acids, petroleum, calcium salts	Inhalation	Chronic effects, systemic	11.75 mg/m ³
		Dermal	Chronic effects, local
		Chronic effects, systemic	3.33 mg/kg bw/day

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No 1907/2006:

Substance	Environmental protection target	PNEC	
Calcium carbonate	Microorganisms in sewage treatment	100 mg/l	
Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil – unspecified	Food chain	9.33 mg/kg food	
Calcium dodecylbenzenesulphonate	Fresh water	0.28 mg/l	
	Freshwater sediments	27.5 mg/kg	
	Marine water	0.458 mg/l	
	Marine sediments	2.75 mg/kg	
	Food chain	20 mg/kg food	
	Microorganisms in sewage treatment	50 mg/l	
	Soil (agricultural)	25 mg/kg dry wt.	
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	Air	10 mg/m ³	
	Fresh water	0.051 mg/l	
	Freshwater sediments	9320 mg/kg	
	Marine water	0.0051 mg/l	
	Marine sediments	932 mg/kg	
	Soil (agricultural)	1860 mg/kg	
	Microorganisms in sewage treatment	1 mg/l	
	Sulfonic acids, petroleum, calcium salts	Fresh water	1 mg/l
		Freshwater sediments	226,000,000 mg/kg
		Marine water	1 mg/l
Marine sediments		226,000,000 mg/kg	
Soil (agricultural)		271,000,000 mg/kg	
	Microorganisms in sewage treatment	1000 mg/l	

8.2. Exposure controls**8.2.1. Engineering measures**

No special requirements. 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 an approved organic vapor respirator for mists.

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

Eye and face protection: Safety goggles or glasses.

Other: Long sleeves, long pants and good personal hygiene to minimize skin contact.

8.2.3. Environmental exposure controls

Refer to sections 6 and 12.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

Physical state	semi-solid	pH	not applicable
Colour	cream	Kinematic viscosity	46 cSt @ 40°C (base oil)
Odour	mild	Solubility in water	insoluble
Odour threshold	not determined	Partition coefficient n-octanol/water (log value)	not applicable
Boiling point or range	not applicable	Vapour pressure @ 20°C	not determined
Melting point/freezing point	> 204°C (> 400°F)	Density and/or relative density	1.0 kg/l
% Volatile (by volume)	negligible	Vapour density (air=1)	> 1
Flammability	no data available	Rate of evaporation (ether=1)	< 1
Lower/upper flammability or explosion limits	not determined	% Aromatics by weight	0
Flash point	> 180°C (> 356°F)	Particle characteristics	not applicable
Method	Open Cup	Explosive properties	not determined
Autoignition temperature	not determined	Oxidising properties	not determined
Decomposition temperature	no data available		

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 under normal conditions.

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

Oxides of Carbon, Sulfur and other toxic fumes.

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

Primary route of exposure under normal use: Skin and eye contact.

Acute toxicity -

Oral: ATE-mix > 5000 mg/kg

Substance	Test	Result
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	LD50, rat, (OECD 401)	> 5000 mg/kg
Calcium dodecylbenzenesulphonate	LD50, rat	1300 mg/kg
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	LD50, rat, (OECD 401)	> 2000 mg/kg
Sulfonic acids, petroleum, calcium salts	LD50, rat	> 5000 mg/kg
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	LD50, rat, (OECD 401)	> 5000 mg/kg
Baseoil	LD50, rat, (OECD 401)	> 5000 mg/kg (similar material)

Dermal:

ATE-mix > 5000 mg/kg

Substance	Test	Result
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	LD50, rabbit	> 5000 mg/kg
Calcium dodecylbenzenesulphonate	LD50, rat	> 5000 mg/kg (read-across)
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	LD50, rat	> 2000 mg/kg
Sulfonic acids, petroleum, calcium salts	LD50, rat (OECD 402)	> 5000 mg/kg
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	LD50, rat (OECD 402)	> 5000 mg/kg
Baseoil	LD50, rat, (OECD 402)	> 2000 mg/kg (similar material)

Inhalation:

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

Substance	Test	Result
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	LC50, rat, mist, 4 h (OPP 81-3)	> 1.9 mg/l
Sulfonic acids, petroleum, calcium salts	LC50, rat, mist, 4 h (OPP 81-3)	> 1.9 mg/l
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	LC50, rat, mist, 4 h (OPP 81-3)	> 1.9 mg/l
Baseoil	LC50, rat, mist, 4 h (OECD 403)	> 5.53 mg/l (similar material)

Skin corrosion/irritation:

Not classified, based on data from similar materials.

Substance	Test	Result
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	Skin irritation, rabbit (OECD 404)	Not irritating
Calcium dodecylbenzenesulphonate	Skin irritation, rabbit (OECD 404)	Irritating
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	Skin irritation, rabbit (OECD 404)	Not irritating
Sulfonic acids, petroleum, calcium salts	Skin irritation, rabbit (OECD 404)	Not irritating
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	Skin irritation, rabbit	Not irritating

Serious eye damage/irritation:

Not classified, based on data from similar materials. May cause mild eye irritation.

Substance	Test	Result
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	Eye irritation, rabbit (OECD 405)	Not irritating
Calcium dodecylbenzenesulphonate	Eye irritation, rabbit (OECD 405)	Severe irritation
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	Eye irritation, rabbit (OECD 405)	Not irritating
Sulfonic acids, petroleum, calcium salts	Eye irritation, rabbit	Not irritating
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	Eye irritation, rabbit	Not irritating

Respiratory or skin sensitisation:

Does not cause skin sensitisation, based on data from similar materials.

Substance	Test	Result
Baseoil	Skin sensitization, guinea pig (OECD 406)	Not sensitizing (similar material)
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	Skin sensitization, guinea pig	Sensitizing weak
Calcium dodecylbenzenesulphonate	Skin sensitization, guinea pig (OECD 406)	Not sensitizing
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	Skin sensitization, guinea pig (OECD 406)	Not sensitizing
Sulfonic acids, petroleum, calcium salts	Skin sensitization, guinea pig	Sensitizing weak
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	Skin sensitization, mouse (OECD 429)	Sensitizing weak

Germ cell mutagenicity:

Not classified, based on available data. Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene Ames test: negative.

Substance	Test	Result
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	Ames test (OECD 471)	negative (similar material)
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	In vitro test, OECD 476	negative (similar material)
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	Micronucleus test, mouse, oral	negative
Calcium dodecylbenzenesulphonate	Ames test (QSAR)	negative
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	Ames test	negative
Sulfonic acids, petroleum, calcium salts	Ames test (OECD 471)	negative (similar material)
Sulfonic acids, petroleum, calcium salts	In vitro test, OECD 476	negative (similar material)
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	Ames test (OECD 471)	negative
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	In vitro test, OECD 476	negative
Baseoil	bacteria, OECD 471	negative

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:

Not classified, based on available data. Calcium carbonate: in animal studies, did not interfere with reproduction.

Substance	Test	Result
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	415, rat, male/female, oral, 28 days	NOAEL >= 500 mg/kg (similar material)
Calcium dodecylbenzenesulphonate	rat, male/female, oral, 20 days	maternal NOAEL: 300 mg/kg developmental NOAEL: 300 mg/kg
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	rat, male/female, oral, 1 generation, OECD 443	Effects on fertility

STOT – single exposure:

Not classified, based on available data. Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts: based on available data, the classification criteria are not met.

STOT – repeated exposure: Not classified, based on available data. Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts: based on available data, the classification criteria are not met.

Substance	Test	Result
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	28-day oral subchronic study (OECD 407) rat, male/female	NOAEL: 500 mg/kg (similar material)
Calcium dodecylbenzenesulphonate	180-day oral subchronic study, rat, male/female	LOAEL: 115 mg/kg
Calcium dodecylbenzenesulphonate	rat, male/female, 30 days	LOAEL: 250 mg/kg

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

11.2. Information on other hazards

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

Calcium dodecylbenzenesulphonate: 96 h LC50 (fish) = 22 mg/l (OECD 203, read-across). Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene: 96 h LC50 (fish) > 71 mg/l (OECD 203). Sulfonic acids, petroleum, calcium salts: 48 h EC50 (for daphnia) = > 100 mg/l (OECD 203).

12.2. Persistence and degradability

Oil: not readily biodegradable. Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts: not readily biodegradable (read-across). Calcium dodecylbenzenesulphonate: readily biodegradable. Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene: not readily biodegradable (CO2 Evolution Test).

12.3. Bioaccumulative potential

Oil: not expected to bioaccumulate. Calcium dodecylbenzenesulphonate: BCF = 104 (fish, 21 days).

12.4. Mobility in soil

Semi-solid. Insoluble in water. In determining environmental mobility, consider the product's physical and chemical properties (see Section 9). Oil products, improperly released to the environment, can cause ground and water pollution.

12.5. Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6. Endocrine disrupting properties

None known

12.7. Other adverse effects

None known

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Incinerate absorbed material with a properly licensed facility. Check local, state and national/federal regulations and comply with the most stringent requirement.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number or ID number

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

14.2. UN proper shipping name

ADG/ADR/RID/ADN/IMDG/ICAO: NON-HAZARDOUS, NON REGULATED
TDG: NON-HAZARDOUS, NON REGULATED
US DOT: NON-HAZARDOUS, NON REGULATED

14.3. Transport hazard class(es)

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

14.4. Packing group

ADG/ADR/RID/ADN/IMDG/ICAO: NOT APPLICABLE
TDG: NOT APPLICABLE

US DOT: NOT APPLICABLE

14.5. Environmental hazards

NOT APPLICABLE

14.6. Special precautions for user

NOT APPLICABLE

14.7. Maritime transport in bulk according to IMO instruments

NOT APPLICABLE

14.8. Other information

NOT APPLICABLE

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: None

15.1.2. National regulations

None

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
 TWA: Time Weighted Average
 vPvB: very Persistent and very Bioaccumulative substance
 WEL: Workplace Exposure Limit
 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 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
Not applicable	Not applicable

Relevant H-statements: H302: Harmful if swallowed.
 H315: Causes skin irritation.
 H317: May cause an allergic skin reaction.
 H318: Causes serious eye damage.
 H361f: Suspected of damaging fertility.
 H412: Harmful to aquatic life with long lasting effects.
 H413: May cause long lasting harmful effects to aquatic life.

Hazard pictogram names: Not applicable

Further information: None

Changes to the SDS in this revision: Section 11.1 (skin sensitization data).

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.