



SAFETY DATA SHEET

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

Revision date: 22 April 2022

Date of previous issue: –

SDS No. 481

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

1.1. Product identifier

638 EMG 100 # 2 Electric Motor Grease

Unique Formula Identifier (UFI): Not available

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

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

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:

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] / 29 CFR 1910.1200 / WHMIS 2015 / GHS

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. However, a safety data sheet is being supplied for it on request as it contains at least one substance posing human health or environmental hazards.

2.1.2. Australian statement of hazardous nature

Not classified as hazardous according to criteria of Safe Work Australia.

2.1.3. Additional information

None

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP] / 29 CFR 1910.1200 / WHMIS 2015 / GHS

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. 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
4,4'-Methylene bis(dibutylidithiocarbamate)	5 - 10	10254-57-6 233-593-1	NA	Aquatic Chronic 4, H413	ATE (oral): 16,000 mg/kg ATE (dermal): > 2,000 mg/kg
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	1 - 5	68584-23-6 271-529-4	NA	Skin Sens. 1B, H317	ATE (oral): > 5,000 mg/kg ATE (dermal): > 5,000 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): 1,300 mg/kg ATE (dermal): > 5,000 mg/kg
Bis(nonylphenyl)amine	1 - 5	36878-20-3 253-249-4	NA	Aquatic Chronic 4, H413	ATE (oral): > 5,000 mg/kg
Sulfonic acids, petroleum, calcium salts	1 - 5	61789-86-4 263-093-4	NA	Skin Sens. 1B, H317	ATE (oral): > 5,000 mg/kg ATE (dermal): > 5,000 mg/kg ATE (inhalation, mist): > 1.9 mg/l
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	1 - 5	70024-69-0 274-263-7	NA	Skin Sens. 1B, H317	ATE (oral): > 5,000 mg/kg ATE (dermal): > 5,000 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): 6,450 mg/kg
Baseoil – unspecified*	10 - 20	64741-88-4 265-090-8	NA	Not classified**	ATE (oral): > 5,000 mg/kg ATE (dermal): > 2,000 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:

- 29 CFR 1910.1200, 1915, 1916, 1917, Mass. Right-to-Know Law (ch. 40, M.G.L..O. 111F)
- 1272/2008/EC, GHS, REACH
- WHMIS 2015
- Safe Work Australia

SECTION 4: FIRST AID MEASURES**4.1. Description of first aid measures**

- Inhalation:** Remove to fresh air. If not breathing, administer artificial respiration. Contact physician.
- Skin contact:** Wash skin with soap and water. Contact physician if irritation persists.
- Eye contact:** Flush eyes for at least 15 minutes with large amounts of water. Contact physician immediately.
- Ingestion:** Do not induce vomiting. Contact physician.
- Protection of first-aiders:** No action shall be taken involving any personal risk or without suitable training.

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: Carbon dioxide, dry chemical, dry sand, foam or water fog

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, Sulfur and Calcium and other toxic fumes. Dense smoke.

Other hazards: None known

5.3. Advice for firefighters

Recommend Firefighters wear self-contained breathing apparatus.

Australian HAZCHEM Emergency Action Code: 2 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. Keep container closed when not in use. Protect from contamination. 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 away from oxidising agents.

7.3. Specific end use(s)

No special precautions.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters****Occupational exposure limit values**

Ingredients	OSHA PEL ¹		ACGIH TLV ²		UK WEL ³		AUSTRALIA ES ⁴	
	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³
4,4'-Methylene bis(dibutylthiocarbamate)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	N/A	N/A	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	N/A	N/A
Bis(nonylphenyl)amine	N/A	N/A	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	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	N/A	N/A
Calcium carbonate	(total)	15	(inhal.)	10 *	(inhal.)	10	N/A	10
	(resp.)	5	(resp.)	3	(resp.)	4		
Oil mist, mineral	N/A	5	N/A	5	N/A	N/A	N/A	5

* Particles Not Otherwise Specified (PNOS)

¹ United States Occupational Health & Safety Administration permissible exposure limits² American Conference of Governmental Industrial Hygienists threshold limit values³ EH40 Workplace exposure limits, Health & Safety Executive⁴ 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
Bis(nonylphenyl)amine	Inhalation	Chronic effects, systemic	4.37 mg/m ³
	Dermal	Chronic effects, systemic	0.62 mg/kg

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

Substance	Environmental protection target	PNEC
Bis(nonylphenyl)amine	Fresh water	0.1 mg/l
	Freshwater sediments	132,000 mg/kg
	Marine water	0.01 mg/l
	Marine sediments	13,200 mg/kg

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	green	Kinematic viscosity	not determined
Odour	mild	Solubility in water	insoluble
Odour threshold	not determined	Partition coefficient n-octanol/water	not applicable
Boiling point or range	not applicable	Vapour pressure @ 20°C	< 0.0008 hPa (0.00 mm Hg)
Melting point/freezing point	not determined	Density and/or relative density	1.0 kg/l
% Volatile (by volume)	negligible	Weight per volume	8.3 lbs/gal.
Flammability	no data available	Vapour density (air=1)	> 1
Lower/upper flammability or explosion limits	not determined	Rate of evaporation (ether=1)	< 1
Flash point	> 180°C (> 356°F)	% Aromatics by weight	0
Method	PM Closed Cup	Particle characteristics	not applicable
Autoignition temperature	not determined	Explosive properties	not determined
Decomposition temperature	no data available	Oxidising properties	not determined

9.2. Other information

None

SECTION 10: STABILITY AND REACTIVITY**10.1. Reactivity**

Refer to sections 10.3 and 10.5.

10.2. Chemical stability

Stable 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 acids/bases and strong oxidizers like liquid Chlorine and concentrated Oxygen.

10.6. Hazardous decomposition products

Carbon Monoxide, Carbon Dioxide, oxides of Nitrogen, Sulfur and Calcium 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: Skin and eye contact.

Acute toxicity -

Oral: ATE-mix > 5,000 mg/kg

Substance	Test	Result
4,4'-Methylene bis(dibutyldithiocarbamate)	LD50, rat	16,000 mg/kg
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	LD50, rat, (OECD 401)	> 5,000 mg/kg
Calcium dodecylbenzenesulphonate	LD50, rat	1,300 mg/kg
Bis(nonylphenyl)amine	LD50, rat	> 5,000 mg/kg
Sulfonic acids, petroleum, calcium salts	LD50, rat, (OECD 401)	> 5,000 mg/kg
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	LD50, rat, (OECD 401)	> 5000 mg/kg
Distillates (petroleum), solvent-refined heavy paraffinic	LD50, rat	> 5000 mg/kg

Dermal: ATE-mix > 5,000 mg/kg

Substance	Test	Result
4,4'-Methylene bis(dibutylidithiocarbamate)	LD50, rabbit	> 2,000 mg/kg
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	LD50, rabbit	> 5,000 mg/kg
Calcium dodecylbenzenesulphonate	LD50, rat	> 5,000 mg/kg (read-across)
Sulfonic acids, petroleum, calcium salts	LD50, rat (OECD 402)	> 5,000 mg/kg
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	LD50, rat (OECD 402)	> 5000 mg/kg
Distillates (petroleum), solvent-refined heavy paraffinic	LD50, rabbit	> 2,000 mg/kg (read-across)

Inhalation: Not classified, based on available data.

Substance	Test	Result
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	LC50, rat, mist (OPP 81-3)	> 1.9 mg/l
Sulfonic acids, petroleum, calcium salts	LC50, rat, mist (OPP 81-3)	> 1.9 mg/l
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	LC50, rat, mist (OPP 81-3)	> 1.9 mg/l
Distillates (petroleum), solvent-refined heavy paraffinic	LC50, rat, mist	> 5.53 mg/l

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	Irritating
Bis(nonylphenyl)amine	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
Bis(nonylphenyl)amine	Eye irritation, rabbit	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. Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts, Sulfonic acids, petroleum, calcium salts, Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts: probability or evidence of low to moderate skin sensitisation rate in humans.

Substance	Test	Result
Calcium dodecylbenzenesulphonate	Skin sensitization, guinea pig (OECD 406)	Not sensitizing
Bis(nonylphenyl)amine	Skin sensitization, guinea pig	Not sensitizing
Distillates (petroleum), solvent-refined heavy paraffinic	Skin sensitization, guinea pig	Not sensitizing

Germ cell mutagenicity: Not classified, based on available data.

Substance	Test	Result
4,4'-Methylene bis(dibutyldithiocarbamate)	Ames test	negative
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
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
Distillates (petroleum), solvent-refined heavy paraffinic	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. 4,4'-Methylene bis(dibutyldithiocarbamate), 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

STOT – single exposure: Not classified due to lack of 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. 4,4'-Methylene bis(dibutyldithiocarbamate), 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

4,4'-Methylene bis(dibutyldithiocarbamate): chronic NOEC (Daphnia magna) 21 days > 0.247 mg/l. 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: 96 h LC50 (fish) > 10,000 mg/l. Oil: practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/ErC50 > 100 mg/l.) Bis(nonylphenyl)amine: 96 h LC50 (fish) < 1000 mg/l.

12.2. Persistence and degradability

Oil: not readily biodegradable. 4,4'-Methylene bis(dibutyldithiocarbamate): not readily biodegradable (OECD 301B, 28 days: 21%). Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts: not readily biodegradable (read-across). Calcium dodecylbenzenesulphonate: readily biodegradable (73%, 28 days). Sulfonic acids, petroleum, calcium salts: not readily biodegradable (8.6%, 28 days).

12.3. Bioaccumulative potential

Oil: not expected to bioaccumulate. 4,4'-Methylene bis(dibutyldithiocarbamate): log Kow = 6.73, estimated. Calcium dodecylbenzenesulphonate: BCF = 104 (fish, 21 days); log Kow 3.9 – 6; has the potential to bioaccumulate, however metabolism or physical properties may reduce the bioconcentration or limit bioavailability.

12.4. Mobility in soil

Insoluble in water. In determining environmental mobility, consider the product's physical and chemical properties (see Section 9).

Oil: expected to exhibit low mobility in soil.

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****US EPA SARA TITLE III****312 Hazards:**

None

Chemicals subject to reporting requirements of Section 313 of EPCRA and of 40 CFR 372:

None

Other 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
 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 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.
 H413: May cause long lasting harmful effects to aquatic life.

Hazard pictogram names: Not applicable

Further information: None

Date of last revision: 22 April 2022

Changes to the SDS in this revision: Original issue.

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.