### ChemChill

1.1.

1.2.

1.3.

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2.1.

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### CHEMCHILL ELECTRIC MOTOR CLEANER 20 OZ.

Safety Data Sheet

SECTION 1: Identification of the substance/mixture and of the company/undertaking

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 07/09/2014 Supersedes:01/16/2014

**Product identifier** : Mixture Product form : CHEMCHILL ELECTRIC MOTOR CLEANER 20 OZ. Trade name Product code : 166130 Relevant identified uses of the substance or mixture and uses advised against : Follow Label Directions Use of the substance/mixture Details of the supplier of the safety data sheet Climate Components, LLC 725 Old Norcross rd. #D Lawrenceville, GA 30046 **Emergency telephone number** Emergency number : CHEMTREC 24 Hour 1-800-424-9300 **SECTION 2: Hazards identification Classification of the substance or mixture Classification (GHS-US)** Acute Tox. 4 (Inhalation) H332 Eve Irrit. 2B H320 Carc. 1B H350 **Label elements GHS-US** labeling Hazard pictograms (GHS-US) GHS07 GHS08 Signal word (GHS-US) : Danger Hazard statements (GHS-US) H320 - Causes eye irritation H332 - Harmful if inhaled H350 - May cause cancer H280 - Contains gas under pressure; may explode if heated P201 - Obtain special instructions before use Precautionary statements (GHS-US) P202 - Do not handle until all safety precautions have been read and understood P261 - Avoid breathing dust/fume/gas/mist/vapors/spray P264 - Wash ... thoroughly after handling P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P308+P313 - If exposed or concerned: Get medical advice/attention P312 - Call a poison center/doctor/... if you feel unwell P337+P313 - If eye irritation persists: Get medical advice/attention P405 - Store locked up P501 - Dispose of contents/container to ... P251 - Pressurized container: Do not pierce or burn, even after use P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F **Other hazards** Other hazards not contributing to the : Contains gas under pressure; may explode if heated. classification **Unknown acute toxicity (GHS-US)** No data available **SECTION 3: Composition/information on ingredients** Substance

3.1.

Not applicable

3.2. **Mixture** 

2.3.

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Name		Product identifier	%	Classification (GHS-US)
tetrachloroethylene		(CAS No) 127-18-4	>= 95	Carc. 1B, H350 Aquatic Chronic 2, H411
carbon dioxide, liquefied, under pressure		(CAS No) 124-38-9	1 - 5	Compressed gas, H280
SECTION 4: First aid measures				
4.1. Description of first aid measures	s.			
First-aid measures general		er give anything by mouth to an	unconscious person. I	f you feel unwell, seek medical advi
		ow the label where possible).		
First-aid measures after inhalation		ure fresh air breathing. Allow the		
First-aid measures after skin contact		nove affected clothing and wash m water rinse.	all exposed skin area	with mild soap and water, followed
First-aid measures after eye contact	and	easy to do. Continue rinsing.		es. Remove contact lenses, if preser
First-aid measures after ingestion	: Rins	se mouth. Do NOT induce vomiting	ng. Obtain emergency	medical attention.
4.2. Most important symptoms and e	ffects, both	n acute and delayed		
Symptoms/injuries	: May	cause cancer.		
Symptoms/injuries after eye contact	: Cau	ises eye irritation.		
4.3. Indication of any immediate med	lical attenti	on and special treatment need	led	
No additional information available				
SECTION 5: Firefighting measure	S			
5.1. Extinguishing media				
Suitable extinguishing media	: Foa	m. Dry powder. Carbon dioxide.	Water spray. Sand.	
Unsuitable extinguishing media		not use a heavy water stream.	,	
5.2. Special hazards arising from the		-		
No additional information available	Substance			
5.3. Advice for firefighters	i Llee	water enrav or fog for cooling of	rosed containers	arcise caution when fighting on a
Firefighting instructions		water spray or fog for cooling ex mical fire. Prevent fire-fighting wa		
Protection during firefighting		not enter fire area without proper	•	
Other information	: NFF	PA Aerosol Level 1.		
SECTION 6: Accidental release m		(		
6.1. Personal precautions, protective	equipmen	t and emergency procedures		
6.1.1. For non-emergency personnel				
Protective equipment	: Glov	ves. Safety glasses.		
Emergency procedures	: Eva	cuate unnecessary personnel.		
6.1.2. For emergency responders				
Protective equipment	: Equ	ip cleanup crew with proper prote	ection.	
Emergency procedures		tilate area.		
6.2. Environmental precautions				
Prevent entry to sewers and public waters. N	lotify author	ities if liquid enters sewers or put	olic waters.	
· ·				
6.3. Methods and material for contai For containment		• •		
		n up the liquid spill.	as clay or distomass	us earth as soon as possible. Calle
Methods for cleaning up	spill	age. Store away from other mate	erials.	ous earth as soon as possible. Colle
6.4. Reference to other sections		•		
See Heading 8. Exposure controls and perso	onal protecti	on.		
SECTION 7: Handling and storage		- 		
SECTION / Handling and storage	9			
7.1. Precautions for safe handling			as with mild soap and	water before eating, drinking or
7.1. Precautions for safe handling	smo vapo	king and when leaving work. Pro	ovide good ventilation i	
	smo vapo beei	oking and when leaving work. Pro or. Obtain special instructions be	ovide good ventilation fore use. Do not hand	in process area to prevent formation le until all safety precautions have

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7.2.	7.2. Conditions for safe storage, including any incompatibilities		
Storage	e conditions	: Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.	
Incomp	atible products	: Strong bases. Strong acids.	
Incomp	atible materials	: Sources of ignition. Direct sunlight.	
7.3.	Specific end use(s)		

Follow Label Directions.

### SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

tetrachloroethylene (127-18-4)		
USA ACGIH	ACGIH TWA (ppm)	25 ppm
USA ACGIH	ACGIH STEL (ppm)	25 ppm

carbon dioxide, liquefied, under pressure (124-38-9)		
USA ACGIH	ACGIH TWA (ppm)	5000 ppm
USA ACGIH	ACGIH STEL (ppm)	5000 ppm

#### 8.2. Exposure controls

Personal protective equipment

: Gloves. Safety glasses. Avoid all unnecessary exposure.



Hand protection	
Eye protection	
Respiratory protection	

Respiratory protection Other information

- Chemical goggles or safety glasses.Wear appropriate mask.
- - : Do not eat, drink or smoke during use.

SECTION 9: Phy	vsical and chem	ical properties

9.1. Information on basic physical and	chemical properties
Physical state	: Liquid
Appearance	: Liquid.
Molecular mass	: 165.83 g/mol
Color	: Colourless.
Odor	: Sweet odour. Ether-like odour.
Odor threshold	: 2.0 - 71 ppm
рН	: 6.8 - 8.4
Relative evaporation rate (butyl acetate=1)	: 2
Relative evaporation rate (ether=1)	: 8
Melting point	: -22 °C
Freezing point	: No data available
Boiling point	: 121 °C
Flash point	: No data available
Critical temperature	: 347 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: > 150 °C
Flammability (solid, gas)	: No data available
Vapor pressure	: 19 hPa
Vapor pressure at 50 °C	: 82 hPa
Relative vapor density at 20 °C	: 5.8
Relative density	: 1.6
Relative density of saturated gas/air mixture	: 1.1
Density	: 1623 kg/m³

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Solubility	<ul> <li>Insoluble in water. Substance sinks in water. Soluble in ethanol. Soluble in ether. Soluble in acetone. Soluble in chloroform. Soluble in tetrachloromethane. Soluble in hexane. Soluble in oils/fats.</li> <li>Water: 0.015 g/100ml Ethanol: soluble</li> <li>Ether: soluble</li> <li>Acetone: &gt; 10 g/100ml</li> </ul>
Log Pow	: 3.40 (Experimental value; 2.53; Experimental value; Equivalent or similar to OECD 107; 23 °C)
Log Kow	: No data available
Viscosity, kinematic	: 0.555 mm²/s (20 °C)
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: No data available
9.2. Other information	
Saturation concentration	: 127 g/m³
VOC content	: 0%
SECTION 10: Stability and reactive	ity
10.1. Reactivity	
No additional information available	
10.2. Chemical stability	
Not established.	
10.3. Possibility of hazardous reaction	15
Not established.	
10.4. Conditions to avoid	
Direct sunlight. Extremely high or low temper	atures.
10.5. Incompatible materials	
Strong acids. Strong bases.	
10.6. Hazardous decomposition produ	icts
fume. Carbon monoxide. Carbon dioxide.	
SECTION 11: Toxicological inform	hation
11.1. Information on toxicological effe	cts
Acute toxicity	: Harmful if inhaled.

Carcinogenicity	: May cause cancer.
Serm cell mutagenicity	: Not classifiedBased on available data, the classification criteria are not met
Respiratory or skin sensitization	: Not classified
Propiratory or also appointing the	pH: 6.8 - 8.4
Serious eye damage/irritation	: Causes eye irritation.
	pH: 6.8 - 8.4
kin corrosion/irritation	: Not classified
LC50 inhalation rat (ppm)	3786 ppm/4h (Rat; Experimental value)
LC50 inhalation rat (mg/l)	27.58 mg/l/4h (Rat; Literature study)
LD50 dermal rabbit	> 3000 mg/kg (Rabbit; Literature study; >10000 mg/kg bodyweight; Rabbit; Experimental value)
LD50 oral rat	> 2000 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; 3835 mg/kg bodyweight; Rat; Equivalent or similar to OECD 401; Experimental value; 3005 mg/kg bodyweight; Rat; Experimental value)
tetrachloroethylene (127-18-4)	
LC50 inhalation rat (ppm)	3786 ppm/4h (Rat; Experimental value)
LC50 inhalation rat (mg/l)	27.58 mg/l/4h (Rat; Literature study)
LD50 dermal rabbit	> 3000 mg/kg (Rabbit; Literature study; >10000 mg/kg bodyweight; Rabbit; Experimental value)
LD50 oral rat	> 2000 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; 3835 mg/kg bodyweight; Rat; Equivalent or similar to OECD 401; Experimental value; 3005 mg/kg bodyweight; Rat; Experimental value)

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CHEMCHILL ELECTRIC MOTOR CLEANER 20 OZ.		
IARC group	2A	
tetrachloroethylene (127-18-4)		
IARC group	2A	
Reproductive toxicity	: Not classifiedBased on available data, the classification criteria are not met	
Specific target organ toxicity (single exposure)	: Not classified	
Specific target organ toxicity (repeated exposure)	: Not classifiedBased on available data, the classification criteria are not met	
Aspiration hazard	: Not classifiedBased on available data, the classification criteria are not met	
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.	
Symptoms/injuries after eye contact	: Causes eye irritation.	
SECTION 12: Ecological information		
12.1. Toxicity		

12.1. IOXICITY	
Ecology - general	: Dangerous for the environment.
Ecology - air	: Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009). Not included in the list of substances which may contribute to the greenhouse effect (Regulation (EC) No 842/2006). TA-Luft Klasse 5.2.5/I.
CHEMCHILL ELECTRIC MOTOR CLEANER 2	0 OZ.
LC50 fish 1	4.99 mg/l (96 h; Salmo gairdneri (Oncorhynchus mykiss); Locomotor effect)
EC50 Daphnia 1	8.5 mg/l (48 h; Daphnia magna; Locomotor effect)
LC50 fish 2	13 mg/l (96 h; Lepomis macrochirus)
tetrachloroethylene (127-18-4)	

, , ,		
LC50 fish 1	4.99 mg/l (96 h; Salmo gairdneri (Oncorhynchus mykiss); Locomotor effect)	
EC50 Daphnia 1	8.5 mg/l (48 h; Daphnia magna; Locomotor effect)	
LC50 fish 2	13 mg/l (96 h; Lepomis macrochirus)	
Threshold limit algae 1	816 mg/l (96 h; Selenastrum capricornutum; Cell numbers)	
Threshold limit algae 2	3.64 mg/l (72 h; Chlamydomonas angulosa; Growth rate)	
and an disside lines (ad an denome some (404.00.0)		

carbon dioxide, liquefied, under pressure (124-38-9)	
LC50 fish 1	35 mg/l (96 h; Salmo gairdneri (Oncorhynchus mykiss); Lethal)
LC50 fish 2	60 - 240 mg/l (12 h; Salmo gairdneri (Oncorhynchus mykiss); Lethal)

#### Persistence and degradability 12.2.

CHEMCHILL ELECTRIC MOTOR CLEANER 20 OZ.		
Persistence and degradability	Not readily biodegradable in water. Low potential for adsorption in soil.	
Biochemical oxygen demand (BOD)	0.06 g O <sub>2</sub> /g substance	
ThOD	0.39 g O <sub>2</sub> /g substance	
BOD (% of ThOD)	0.15 % ThOD	
tetrachloroethylene (127-18-4)		
Persistence and degradability	Not readily biodegradable in water. Low potential for adsorption in soil.	
Biochemical oxygen demand (BOD)	0.06 g O <sub>2</sub> /g substance	
ThOD	0.39 g O <sub>2</sub> /g substance	
BOD (% of ThOD)	0.15 % ThOD	
carbon dioxide, liquefied, under pressure (124-38-9)		
Porsistoneo and dogradability	Biodogradability: not applicable. No (tost)data on mobility of the substance available	

Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the substance available.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

10.0	
12.3.	Bioaccumulative potential
12.0.	Biodoodinalative potential

CHEMCHILL ELECTRIC MOTOR CLEA	NER 20 OZ.
BCF fish 1	40 - 115 Salmo gairdneri (Oncorhynchus mykiss)
BCF fish 2	25.8 - 77.1 (8 weeks; Cyprinus carpio)
BCF other aquatic organisms 1	63 (Modiolus modiolus; Mantle, dry weight)
BCF other aquatic organisms 2	39 (Buccinum undatum; Muscles, dry weight)
Log Pow	3.40 (Experimental value; 2.53; Experimental value; Equivalent or similar to OECD 107; 23 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
15/07/2014	EN (English LIS) 5/8

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tetrachloroethylene (127-18-4)	
BCF fish 1	40 - 115 Salmo gairdneri (Oncorhynchus mykiss)
BCF fish 2	25.8 - 77.1 (8 weeks; Cyprinus carpio)
BCF other aquatic organisms 1	63 (Modiolus modiolus; Mantle, dry weight)
BCF other aquatic organisms 2	39 (Buccinum undatum; Muscles, dry weight)
Log Pow	3.40 (Experimental value; 2.53; Experimental value; Equivalent or similar to OECD 107; 23 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
carbon dioxide, liquefied, under pressure (1	24.38-0)
Log Pow	0.83 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
12.4. Mobility in soil	
CHEMCHILL ELECTRIC MOTOR CLEANER	
Surface tension	0.0313 N/m (20 °C)
tetrachloroethylene (127-18-4)	
Surface tension	0.0313 N/m (20 °C)
12.5. Other adverse effects	
Other information	: Avoid release to the environment.
SECTION 13: Disposal consideration	
•	
	· Dianaga in a sofe menner in accordance with level/patienal regulations. Dianaga of
Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to
Ecology - waste materials	: Avoid release to the environment.
SECTION 14: Transport information In accordance with ADR / RID / IMDG / IATA / AI	N
US DOT (ground): UN1950, Aerosols, 2.2	Limited Quantity
	-
ICAO/IATA (air): UN1950, Aerosols, 2.2	
IMO/IMDG (water): UN1950, Aerosols, 2.2	, Limited Quantity
14.2. UN proper shipping name	
DOT Proper Shipping Name	: Aerosols
	poison, (each not exceeding 1 L capacity)
Department of Transportation (DOT) Hazard Classes	: 2.2 - Class 2.2 - Non-flammable compressed gas 49 CFR 173.115
Hazard labels (DOT)	: 2.2 - Non-flammable gas
	6.1 - Poison inhalation hazard
	6
DOT Packaging Exceptions (49 CFR 173.xxx)	: 306
DOT Packaging Non Bulk (49 CFR 173.xxx)	: None
DOT Packaging Bulk (49 CFR 173.xxx)	: None
Marine pollutant	: Yes
$\underline{\Psi}_{n}$	
14.3. Additional information	·
Other information	: No supplementary information available.
	. No supplementary information available.

#### **Overland transport**

No additional information available

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Transport by sea	
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
DOT Vessel Stowage Other	: 48 - Stow "away from" sources of heat,87 - Stow "separated from" Class 1 (explosives) except Division 14,126 - Segregation same as for Class 9, miscellaneous hazardous materials
Air transport	
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: Forbidden
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: Forbidden

SECTION 15: Regulatory information		
15.1. US Federal regulations		
CHEMCHILL ELECTRIC MOTOR CLEANER 20	OZ.	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard	
tetrachloroethylene (127-18-4)		
Listed on the United States SARA Section 302 Listed on United States SARA Section 313		
RQ (Reportable quantity, section 304 of EPA's List of Lists) :	100 lb Tetrachloroethylene	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard	

### 15.2. International regulations

#### CANADA

CHEMCHILL ELECTRIC MOTOR CLEANER 20 OZ.		
WHMIS Classification	Class D Division 1 Subdivision B - Toxic material causing immediate and serious toxic effects Class D Division 2 Subdivision A - Very toxic material causing other toxic effects	
tetrachloroethylene (127-18-4)		
Listed on the Canadian DSL (Domestic Sustance	s List)	
WHMIS Classification	Class D Division 1 Subdivision B - Toxic material causing immediate and serious toxic effects Class D Division 2 Subdivision A - Very toxic material causing other toxic effects	

### **EU-Regulations**

No additional information available

### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC or 1999/45/EC
Carc.Cat.3; R40
N; R51/53

Full text of R-phrases: see section 16

#### 15.2.2. National regulations

### tetrachloroethylene (127-18-4)

Listed on the Canadian IDL (Ingredient Disclosure List)

15.3. US State regulations

CHEMCHILL ELECTRIC MOTOR CLEANER 20 OZ.()	
State or local regulations	Not for sale in California or New Jersey
	U.S Pennsylvania - RTK (Right to Know) List

### tetrachloroethylene (127-18-4)

U.S California - Proposition 65 - Maximum Allowable Dose Levels (MADL)	
Not for sale in California or New Jersey	
U.S Pennsylvania - RTK (Right to Know) List	

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SECT	ION 16: Other information			
Indication of changes Training advice		: Revision - See : *. : Normal use of this product shall imply use in accordance with the instructions on the packaging.		
Other information		: None.		
Full text of H-phrases: see section 16:				
	Acute Tox. 4 (Inhalation)		Acute toxicity (inhalation) Category 4	
	Aquatic Chronic 2		Hazardous to the aquatic environment - Chronic Hazard Category 2	
	Carc. 1B		Carcinogenicity Category 1B	
	Compressed gas		Gases under pressure Compressed gas	
	Eye Irrit. 2B		Serious eye damage/eye irritation Category 2B	
	H280		Contains gas under pressure; may explode if heated	
	H320		Causes eye irritation	
	H332		Harmful if inhaled	
	H350		May cause cancer	
	H411		Toxic to aquatic life with long lasting effects	

NFPA health hazard	<ul> <li>2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.</li> </ul>	
NFPA fire hazard	: 0 - Materials that will not burn.	
NFPA reactivity	: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.	

HMIS III Rating	
Health	: 2 Moderate Hazard - Temporary or minor injury may occur
Flammability	: 0 Minimal Hazard
Physical	: 2 Moderate Hazard
Personal Protection	: B

SDS US (GHS HazCom 2012) - Technical Chemical

The Supplier identified in Section 1 of this MSDS has evaluated this product and certifies it to be labeled and packaged in compliance with the applicable provisions of the Federal Hazardous Substance Act as stated in 16 CFR 1500 and enforced by the Consumer Product Safety Commission, and where applicable the products that require Child Resistant Closures are packaged in accordance with the Poison Prevention Packaging Act as stated in 16 CFR 1700 and enforced by the Consumer Product Safety Commission. All closures have been tested in accordance with the latest protocols. No other testing is required to certify compliance with the above. The date of manufacture is stamped on the product

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