

Other hazards not contributing to the

05/11/2014

JOHNSEN'S ELECTRONIC CLEANER 10 OZ.

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

	<i>r</i> ision date: 11/04/2014 :	Versio
SECTION 1: Identification of the	substance/mixture and of the company/undertaking	
1.1. Product identifier		
Product form	: Mixture	
Trade name	: JOHNSEN'S ELECTRONIC CLEANER 10 OZ.	
Product code	: 4600	
1.2. Relevant identified uses of the	substance or mixture and uses advised against	
Use of the substance/mixture	: Electronic Cleaner	
1.3. Details of the supplier of the sa Technical Chemical Company P.O. BOX 139 Cleburne, Texas 76033 T 817-645-6088	fety data sheet	
1.4. Emergency telephone number		
Emergency number	: CHEMTREC 24 Hour 1-800-424-9300, 1-703-527-3887 (International)	
SECTION 2: Hazards identification	bn	
2.1. Classification of the substance		
Classification (GHS-US)		
Flam. Aerosol 1 H222 Compressed gas H280 Muta. 1B H340 Carc. 1B H350 Repr. 2 H361 STOT SE 1 H370 STOT RE 2 H373		
STOT RE 2 H373 Full text of H-phrases: see section 16		
GHS-US labeling		
Hazard pictograms (GHS-US)		
	GHS02 GHS04 GHS08	
Signal word (GHS-US) Hazard statements (GHS-US)	 Danger H222 - Extremely flammable aerosol H280 - Contains gas under pressure; may explode if heated H340 - May cause genetic defects H350 - May cause cancer H361 - Suspected of damaging fertility or the unborn child H370 - Causes damage to organs H373 - May cause damage to organs through prolonged or repeated exposure 	
Signal word (GHS-US)	 Danger H222 - Extremely flammable aerosol H280 - Contains gas under pressure; may explode if heated H340 - May cause genetic defects H350 - May cause cancer H361 - Suspected of damaging fertility or the unborn child H370 - Causes damage to organs 	

: Contains gas under pressure; may explode if heated.

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classification

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

Substance 3.1.

Not applicable

3.2. Mixture			
Name	Product identifier	%	Classification (GHS-US)
Naphtha (Petroleum), Hydrotreated Light	(CAS No) 64742-49-0	57.6 - 72	Muta. 1B, H340 Carc. 1B, H350 Asp. Tox. 1, H304
1,1-Difluoroethane, Liquefied, Under Pressure	(CAS No) 75-37-6	10 - 30	Liquefied gas, H280
n-Hexane	(CAS No) 110-54-3	0.72 - 3.6	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Methanol	(CAS No) 67-56-1	1 - 5	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:dust,mist), H331 STOT SE 1, H370

SECTION 4: First aid measures	
4.1. Description of first aid measure	S
First-aid measures general	: Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medica advice/attention. Call a POISON CENTER or doctor/physician.
First-aid measures after inhalation	: Cough. Remove to fresh air and keep at rest in a position comfortable for breathing.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact	 Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with wate for several minutes. Direct contact with the eyes is likely to be irritating. Obtain medical attention if pain, blinking or redness persist.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.
4.2. Most important symptoms and	effects, both acute and delayed
Symptoms/injuries	: May cause genetic defects. May cause cancer. Suspected of damaging fertility or the unborn child. Causes damage to organs.
Symptoms/injuries after inhalation	: Shortness of breath. Dizziness.
Symptoms/injuries after skin contact	: May cause slight irritation . Itching. Red skin. Skin rash/inflammation.
Symptoms/injuries after eye contact	: May cause slight eye irritation . Irritation of the eye tissue. Inflammation/damage of the eye tissue. Redness of the eye tissue.
Symptoms/injuries after ingestion	: May be fatal if swallowed and enters airways. May be harmful if swallowed and enters airways.
4.3. Indication of any immediate me	dical attention and special treatment needed
No additional information available	

No additional information available

SECTION 5: Firefighting measur	res
5.1. Extinguishing media	
Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.
5.2. Special hazards arising from the	he substance or mixture
Fire hazard	: Extremely flammable aerosol.
Explosion hazard	: Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.
5.3. Advice for firefighters	
Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment. DO NOT fight fire when fire reaches explosives. Evacuate area.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
Other information	: Aerosol level 3.

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SECTION 6: Accidental release mea	asures
6.1. Personal precautions, protective e	quipment and emergency procedures
General measures	: No naked lights. No smoking. Isolate from fire, if possible, without unnecessary risk. Remove ignition sources. Use special care to avoid static electric charges.
6.1.1. For non-emergency personnel	
Protective equipment	: Gloves. Safety glasses.
Emergency procedures	: Evacuate unnecessary personnel.
6.1.2. For emergency responders	
Protective equipment	: Equip cleanup crew with proper protection. Avoid breathing dust, fume, gas, mist, vapor spray.
Emergency procedures	: Ventilate area.
6.2. Environmental precautions	
	ify authorities if liquid enters sewers or public waters.
6.3. Methods and material for containn	
For containment	: Dam up the liquid spill. Contain released substance, pump into suitable containers. Plug the leak.
r or containinent	cut off the supply.
Methods for cleaning up	: Store away from other materials.
6.4. Reference to other sections	
See Heading 8. Exposure controls and persona	al protection.
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Additional hazards when processed	: Hazardous waste due to potential risk of explosion. Pressurized container: Do not pierce or burn,
	even after use.
Precautions for safe handling	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not spray on an open flame or other ignition source. Obtain special instructions . Do not handle until all safety precautions have been read and understood. Eliminate all ignition sources if safe to do so. Avoid breathing dust,fume,gas,mist,vapor spray. Do not breathe dust,fumes,gas,mist,vapor spray.
Hygiene measures	: Wash affected areas thoroughly after handling. Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
7.2. Conditions for safe storage, includ	ling any incompatibilities
Technical measures	: Proper grounding procedures to avoid static electricity should be followed.
Storage conditions	 Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use. Do not expose to temperatures exceeding 50 °C/ 122 °F. Keep in fireproof place.
Incompatible products	: Strong bases. Strong acids.
Incompatible materials	: Sources of ignition. Direct sunlight. Heat sources.
Storage area	: Store in a well-ventilated place.
7.3. Specific end use(s)	
Follow Label Directions.	
SECTION 8: Exposure controls/per	sonal protection

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Methanol (67-56-1)		
USA ACGIH	ACGIH TWA (mg/m³)	262 mg/m ³
USA ACGIH	ACGIH TWA (ppm)	200 ppm
USA ACGIH	ACGIH STEL (mg/m ³)	328 mg/m ³
USA ACGIH	ACGIH STEL (ppm)	250 ppm
USA OSHA	OSHA PEL (TWA) (mg/m³)	260 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	200 ppm

8.2. Exposure controls

Appropriate engineering controls

: Local exhaust venilation, vent hoods.

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Personal protective equipment

: Gloves. Safety glasses. Avoid all unnecessary exposure.

Hand protection	: Wear protective gloves.
Eye protection	: Chemical goggles or safety glasses.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.
Other information	: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties		
9.1. Information on basic physical and chemical properties		
Physical state	: Gas	
Appearance	: Liquid.	
Color	: Colourless to light yellow.	
Odor	: Solvent-like odour.	
Odor threshold	: No data available	
рН	: No data available	
Relative evaporation rate (butyl acetate=1)	: No data available	
Melting point	: -62 °C (Lowest Component)	
Freezing point	: No data available	
Boiling point	: 37 °C (Lowest Component)	
Flash point	: <-18 °C (Lowest Component)	
Auto-ignition temperature	: No data available	
Decomposition temperature	: No data available	
Flammability (solid, gas)	: No data available	
Vapor pressure	: No data available	
Relative vapor density at 20 °C	: No data available	
Relative density	: 0.69	
Solubility	: Insoluble in water.	
Log Pow	: No data available	
Log Kow	: No data available	
Viscosity, kinematic	: 0.83 cSt	
Viscosity, dynamic	: No data available	
Explosive properties	: No data available	
Oxidizing properties	: No data available	
Explosive limits	: No data available	
9.2. Other information		
VOC content	: 75 %	

SECTIO	DN 10: Stability and reactivity
10.1.	Reactivity
No additi	onal information available
10.2.	Chemical stability
	y flammable aerosol. Contains gas under pressure; may explode if heated. Extreme risk of explosion by shock, friction, fire or other of ignition.
10.3.	Possibility of hazardous reactions
Not estab	blished.
10.4.	Conditions to avoid
Direct su	nlight. Extremely high or low temperatures. Heat. Sparks. Open flame. Overheating.
10.5.	Incompatible materials
Strong ac	sids. Strong bases.
10.6.	Hazardous decomposition products

Toxic fume. . Carbon monoxide. Carbon dioxide.

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SECTION 11: Toxicological information

Information on toxicological effects 11.1.

Acute toxicity

: Not classified

1,1-Difluoroethane, Liquefied, Under Pressure (75-37-6)		
LC50 inhalation rat (mg/l)	176 mg/l/4h (Rat; Literature study)	
LC50 inhalation rat (ppm)	> 437500 ppm/4h Mortality in 2/6 at 43.75% and 1/6 at 38.3%. At ≥ 17.52% lethargy, laboured breathing, reduced responsiveness to sound were observed. At 6.64% only hyperaemia and shallow breathing were observed.	

Methanol (67-56-1)	
LD50 oral rat	>= 2528 mg/kg body weight application as 50% aqueous solution
LD50 dermal rabbit	17100 mg/kg corresponding to 20 ml/kg bw according to the authors
LC50 inhalation rat (mg/l)	128.2 mg/l/4h Air
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: May cause genetic defects.
Carcinogenicity	: May cause cancer.
Reproductive toxicity	: Suspected of damaging fertility or the unborn child.
Specific target organ toxicity (single exposure)	: Causes damage to organs.
Specific target organ toxicity (repeated exposure)	: May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation	: Shortness of breath. Dizziness.
Symptoms/injuries after skin contact	: May cause slight irritation . Itching. Red skin. Skin rash/inflammation.
Symptoms/injuries after eye contact	: May cause slight eye irritation . Irritation of the eye tissue. Inflammation/damage of the eye tissue. Redness of the eye tissue.
Symptoms/injuries after ingestion	: May be fatal if swallowed and enters airways. May be harmful if swallowed and enters airways.

SECTION 12: Ecological information

12.1. Toxicity

Methanol (67-56-1)		
LC50 fish 1	15400 mg/l (96 h; Lepomis macrochirus; Lethal)	
EC50 Daphnia 1	> 10000 mg/l (48 h; Daphnia magna; Lethal)	
LC50 fish 2	10800 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)	
EC50 Daphnia 2	24500 mg/l (48 h; Daphnia magna)	
Threshold limit other aquatic organisms 1	6600 mg/l (16 h; Pseudomonas putida)	
Threshold limit algae 1	530 mg/l (192 h; Microcystis aeruginosa)	
Threshold limit algae 2	8000 mg/l (168 h; Scenedesmus quadricauda)	

12.2. Persistence and degradability

JOHNSEN'S ELECTRONIC CLEANER 10 OZ.		
Persistence and degradability	Not established.	
1,1-Difluoroethane, Liquefied, Under Pressure (75-37-6)		
Persistence and degradability	Biodegradability in water: no data available.	
Methanol (67-56-1)		
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil.	
Biochemical oxygen demand (BOD)	0.6 - 1.12 g O ₂ /g substance	
Chemical oxygen demand (COD)	1.42 g O ₂ /g substance	
ThOD	1.5 g O ₂ /g substance	
BOD (% of ThOD)	0.8 % ThOD	
n-Hexane (110-54-3)		
Persistence and degradability	May cause long-term adverse effects in the environment.	
Naphtha (Petroleum), Hydrotreated Light (64742-49-0)		
Persistence and degradability	Not established.	
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12.3. Bioaccumula	· ·	
JOHNSEN'S ELECTRONIC CLEANER 10 OZ.		
Bioaccumulative potential Not established.		
	iquefied, Under Pressur	
Log Pow		0.75 (Experimental value)
Bioaccumulative poten	tial	Low potential for bioaccumulation (Log Kow < 4).
Methanol (67-56-1)		1
BCF fish 1		< 10 (Leuciscus idus)
Log Pow		-0.77 (Experimental value; Other)
Bioaccumulative poten	tial	Low potential for bioaccumulation (BCF < 500).
n-Hexane (110-54-3)		
Bioaccumulative poten	tial	Not established.
Naphtha (Petroleum),	Hydrotreated Light (64	1742-49-0)
Bioaccumulative poten	tial	Not established.
12.4. Mobility in so	il	
Methanol (67-56-1)		
Surface tension		0.023 N/m (20 °C)
12.5. Other adverse	e effects	
Other information		: Avoid release to the environment.
SECTION 13: Disp	osal consideration	S
13.1. Waste treatm	ent methods	
Waste disposal recomme	endations	: Dispose in a safe manner in accordance with local/national regulations. Container under
		pressure. Do not drill or burn even after use. Dispose of contents/container to appropriate waste disposal facility, in accordance with local, regional, national, international regulations.
Additional information		 Flammable vapors may accumulate in the container.
Ecology - waste material	c	: Avoid release to the environment.
Leology Waste material	5	
SECTION 14: Tran In accordance with ADR	sport information / RID / IMDG / IATA / AD	DN
US DOT (ground):	UN1950, Aerosols, 2.1,	Limited Quantity
ICAO/IATA (air):	UN1950, Aerosols, 2.1	, Limited Quantity
IMO/IMDG (water):	UN1950, Aerosols, 2.1	, Limited Quantity
Special Provisions:	N82 - See 173.306 of th	is subchapter for classification criteria for flammable aerosols.
14.2 LIN menor ch	ipping name	
14.2. UN proper sh Proper Shipping Name (: Aerosols
Toper Shipping Name (flammable, (each not exceeding 1 L capacity)
Department of Transport Classes	ation (DOT) Hazard	: 2.1 - Class 2.1 - Flammable gas 49 CFR 173.115
Hazard labels (DOT)		: 2.1 - Flammable gas
DOT Special Provisions (49 CFR 172.102)		: N82 - See 173.306 of this subchapter for classification criteria for flammable aerosols.
DOT Packaging Exceptions (49 CFR 173.xxx)		: 306
DOT Packaging Non Bulk (49 CFR 173.xxx)		: None
· · ·		: None
14.3. Additional information		
Other information		: 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/rai (49 CFR 173.27)	: 75 kg
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 150 kg

SECTION 15: Regulatory information 15.1. US Federal regulations JOHNSEN'S ELECTRONIC CLEANER 10 OZ. SARA Section 311/312 Hazard Classes Delayed (chronic) health hazard Fire hazard Immediate (acute) health hazard Sudden release of pressure hazard 1,1-Difluoroethane, Liquefied, Under Pressure (75-37-6) Listed on the United States TSCA (Toxic Substances Control Act) inventory SARA Section 311/312 Hazard Classes Fire hazard Sudden release of pressure hazard Immediate (acute) health hazard Methanol (67-56-1) Listed on United States SARA Section 313 Listed on the United States TSCA (Toxic Substances Control Act) inventory SARA Section 311/312 Hazard Classes Immediate (acute) health hazard Delayed (chronic) health hazard Fire hazard

15.2. International regulations

CANADA

JOHNSEN'S ELECTRONIC CLEANER	10 OZ.
WHMIS Classification	Class B Division 5 - Flammable Aerosol
1,1-Difluoroethane, Liquefied, Under F	Pressure (75-37-6)
WHMIS Classification	Class A - Compressed Gas Class B Division 5 - Flammable Aerosol
Methanol (67-56-1)	
WHMIS Classification	Class B Division 2 - Flammable Liquid 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 Class D Division 2 Subdivision B - 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 [DSD] or 1999/45/EC [DPD]

Carc.Cat.2; R45 Muta.Cat.2; R46 Repr.Cat.3; R62 F+; R12 Xn; R20/21/22 Xn; R68/20/21/22 Full text of R-phrases: see section 16

15.2.2. National regulations

No additional information available

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1,1-Difluoroethane, Liquefied, Under Pressure (75-37-6)

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List U.S. Massachusetts Right To Know List

SECTION 16: Other information

Other information Full

: None.

Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Asp. Tox. 1	Aspiration hazard Category 1
Carc. 1B	Carcinogenicity Category 1B
Compressed gas	Gases under pressure Compressed gas
Flam. Aerosol 1	Flammable aerosol Category 1
Flam. Liq. 2	Flammable liquids Category 2
Liquefied gas	Gases under pressure Liquefied gas
Muta. 1B	Germ cell mutagenicity Category 1B
Repr. 2	Reproductive toxicity Category 2
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
STOT SE 1	Specific target organ toxicity (single exposure) Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H222	Extremely flammable aerosol
H225	Highly flammable liquid and vapor
H280	Contains gas under pressure; may explode if heated
H301	Toxic if swallowed
H304	May be fatal if swallowed and enters airways
H311	Toxic in contact with skin
H315	Causes skin irritation
H331	Toxic if inhaled
H336	May cause drowsiness or dizziness
H340	May cause genetic defects
H350	May cause cancer
H361	Suspected of damaging fertility or the unborn child
H370	Causes damage to organs
H373	May cause damage to organs through prolonged or repeated exposure
H411	Toxic to aquatic life with long lasting effects

NFPA health hazard	: 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.
NFPA fire hazard	: 4 - Will rapidly or completely vaporize at normal pressure and temperature, or is readily dispersed in air and will burn readily.
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	: 4 Severe Hazard
Physical	: 1 Slight Hazard
Personal Protection	: B

SDS US (GHS HazCom 2012) - TCC

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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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