Printing date 06/26/2014 Reviewed on 06/26/2014

1 Identification

· Product identifier

· Trade name: Electric Motor Cleaner

· Article number: PK 1615

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier: Power Kleen Corporation 101 South Bayview Blvd. OLDSMAR, FL 34677 USA



Chemical Solutions Since 1973

- · Information department: Product Safety Department
- Emergency telephone number: ChemTel Inc. (800) 255-3924 Intl. +01 (813) 248-0585

2 Hazard(s) identification

· Classification of the substance or mixture



GHS08 Health hazard

Muta. 1B H340 May cause genetic defects.

Carc. 1B H350 May cause cancer.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms





- GHS07
- · Signal word Danger
- · Hazard-determining components of labeling:

trichloroethylene

Stoddard solvent

· Hazard statements

Causes skin irritation.

Causes serious eye irritation.

May cause genetic defects.

May cause cancer.

May cause drowsiness or dizziness.

May be fatal if swallowed and enters airways.

(Contd. on page 2)

Printing date 06/26/2014 Reviewed on 06/26/2014

Trade name: Electric Motor Cleaner

(Contd. of page 1)

· Precautionary statements

Avoid breathing dust/fume/gas/mist/vapours/spray.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Specific treatment (see on this label).

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 2Fire = 2Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Fire = 2

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Substances
- · CAS No. Description

79-01-6 trichloroethylene

- · Identification number(s)
- · EC number: 201-167-4 · Index number: 602-027-00-9
- · Chemical characterization: Mixtures
- · **Description**: Electric Motor Cleaner
- · SVHC

79-01-6 trichloroethylene

4 First-aid measures

- · Description of first aid measures
- · After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. In case of unconsciousness place patient stably in side position for transportation.

- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing:

Call a doctor immediately.

A person vomiting while lying on their back should be turned onto their side.

Administer medicinal carbon

Do not induce vomiting; immediately call for medical help.

(Contd. on page 3)

Printing date 06/26/2014 Reviewed on 06/26/2014

Trade name: Electric Motor Cleaner

(Contd. of page 2)

· Information for doctor:

· Most important symptoms and effects, both acute and delayed

Breathing difficulty

Gastric or intestinal disorders

Nausea

Unconsciousness

Disorientation

Dizziness

Headache

· Danger

Danger of convulsion.

Danger of pulmonary edema.

Danger of disturbed cardiac rhythm.

· Indication of any immediate medical attention and special treatment needed

If swallowed or in case of vomiting, danger of entering the lungs.

Monitor circulation.

If necessary oxygen respiration treatment.

Medical supervision for at least 48 hours.

If swallowed, gastric irrigation with added, activated carbon.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· Special hazards arising from the substance or mixture

Carbon monoxide (CO)

Phosgene gas

- · Advice for firefighters
- · Protective equipment: Wear self-contained respiatory protective device.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Mount respiratory protective device.

Use respiratory protective device against the effects of fumes/dust/aerosol.

· Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

TIC A

Printing date 06/26/2014 Reviewed on 06/26/2014

Trade name: Electric Motor Cleaner

(Contd. of page 3)

7 Handling and storage

- · Handling:
- Precautions for safe handling

Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

Use solvent-proof equipment.

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

- · Information about protection against explosions and fires: Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities
- · Storage.
- · Requirements to be met by storerooms and receptacles:

Provide solvent resistant, sealed floor.

Store in a cool location.

· Information about storage in one common storage facility:

Do not store together with alkalis (caustic solutions).

Store away from foodstuffs.

· Further information about storage conditions:

Store receptacle in a well ventilated area.

Protect from heat and direct sunlight.

Keep receptacle tightly sealed.

· Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

79-01-6 trichloroethylene

PEL Short-term value: C 200; 300* ppm

Long-term value: 100 ppm *5-min peak in any 2 hrs

REL See Pocket Guide Apps. A and C

TLV Short-term value: 135 mg/m³, 25 ppm Long-term value: 54 mg/m³, 10 ppm

BEI

(Contd. on page 5)

Printing date 06/26/2014 Reviewed on 06/26/2014

Trade name: Electric Motor Cleaner

(Contd. of page 4)

· Ingredients with biological limit values:

79-01-6 trichloroethylene

BEI 15 mg/L

Medium: urine

Time: end of shift at end of workweek

Parameter: Trichloroacetic acid (nonspecific)

0.5 mg/L Medium: blood

Time: end of shift at end of workweek

Parameter: Trichloroethanol without hydrolysis (nonspecific)

-Medium: blood

Time: end of shift at end of workweek

Parameter: Trichloroethylene (semi-quantitative)

Medium: end-exhaled air

Time: end of shift at end of workweek

Parameter: Trichloroethylene (semi-quantitative)

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes and skin.

· Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

Neoprene gloves

Fluorocarbon rubber (Viton)

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Not suitable are gloves made of the following materials:

Leather gloves

(Contd. on page 6)

Printing date 06/26/2014 Reviewed on 06/26/2014

Trade name: Electric Motor Cleaner

(Contd. of page 5)

Strong gloves • Eye protection:



Tightly sealed goggles

· Body protection: Solvent resistant protective clothing

Information on basic physical and o	chemical properties
General Information	• •
Appearance:	
Form:	Liquid
Color:	Amber colored
Odor:	Hydrocarbon
Odour threshold:	Not determined.
pH-value:	Not determined.
Change in condition	
Melting point/Melting range:	-86.4 °C (-124 °F)
Boiling point/Boiling range:	87 °C (189 °F)
Flash point:	Not applicable.
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	410 °C (770 °F)
Decomposition temperature:	Not determined.
Auto igniting:	Not determined.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	7.9 Vol %
Upper:	90 Vol %
Vapor pressure at 20 °C (68 °F):	77 hPa (58 mm Hg)
Density at 20 °C (68 °F):	1.46274 g/cm³ (12.207 lbs/gal)
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water at 20 °C (68 °F):	1 g/l
Partition coefficient (n-octanol/water	er): Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Solvent content:	
Organic solvents:	99.9 %

Printing date 06/26/2014 Reviewed on 06/26/2014

Trade name: Electric Motor Cleaner

	(Contd. of page	e 6)
VOC content:	99.9 %	
	1461.3 g/l / 12.19 lb/gl	
Solids content:	0.1 %	
· Other information	No further relevant information available.	

10 Stability and reactivity

- · Reactivity
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions

Reacts with earth alkaline metals.

Reacts with strong oxidizing agents.

Reacts with strong alkali.

· Conditions to avoid

No further relevant information available.

Do not spray on naked incandescent flame or heat source, toxic and dangerous gases may form (Phosgene).

- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products:

Carbon monoxide and carbon dioxide

Hydrogen chloride (HCl)

Phosgene

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

· LD/LC5	0 valu	es that are relevant for classification:
		roethylene
Oral	LD50	2402 mg/kg (mouse)
Dermal	<i>LD50</i>	8450 mg/kg (mouse)

- Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:
- · Carcinogenic categories

· IARC (International Agency for Research on Cancer)	
79-01-6 trichloroethylene	2A
· NTP (National Toxicology Program)	
79-01-6 trichloroethylene	R

12 Ecological information

. Toxicity

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 41 mg/l - 96.0 h

LOEC - other fish - 11 mg/l - 10.0 d

(Contd. on page 8)

Printing date 06/26/2014 Reviewed on 06/26/2014

Trade name: Electric Motor Cleaner

(Contd. of page 7)

NOEC - Oryzias latipes - 40 mg/l - 10.0 d

Toxicity to daphnia

and other aquatic

invertebrates

EC50 - Daphnia magna (Water flea) - 18.00 mg/l - 48 h

Toxicity to algae IC50 - Pseudokirchneriella subcapitata (green algae) - 175.00 mg/l - 96 h

- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- · Remark: Harmful to fish
- · Additional ecological information:
- · General notes:

Water hazard class 3 (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

Harmful to aquatic organisms

- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- **Recommendation:** Disposal must be made according to official regulations.

14 Irans	port inj	formation
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- · UN-Number
- · DOT, IMDG, IATA

UN1710

- · UN proper shipping name
- \cdot **DOT**

Trichloroethylene, solution

· IMDG, IATA

TRICHLOROETHYLENE, solution

- · Transport hazard class(es)
- $\cdot DOT$



· Class 6.1 Toxic substances.

(Contd. on page 9)

Printing date 06/26/2014 Reviewed on 06/26/2014

Trade name: Electric Motor Cleaner

	(Conto	l. of page
· Label	6.1	
· IMDG, IATA		
9		
· Class	6.1 Toxic substances.	
· Label	6.1	
· Packing group		
· DOT, IMDG, IATA	III	
· Environmental hazards:		
· Marine pollutant:	No	
· Special precautions for user		
· Danger code (Kemler):	60	
· EMS Number:	F- A , S - A	
· Segregation groups	Liquid halogenated hydrocarbons	
· Transport in bulk according to Anne.	x II of	
MARPOL73/78 and the IBC Code	Not applicable.	
· UN "Model Regulation":	UN1710, Trichloroethylene, solution, 6.1, III	

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara
- · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

All ingredients are listed.

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

- · Proposition 65
- · Chemicals known to cause cancer:

79-01-6 trichloroethylene

 $\cdot \textit{Chemicals known to cause reproductive toxicity for females:}$

None of the ingredients is listed.

· Chemicalsknown to cause reproductive toxicity for males.

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

- · Carcinogenic categories
- · EPA (Environmental Protection Agency)

None of the ingredients is listed.

(Contd. on page 10)

Printing date 06/26/2014 Reviewed on 06/26/2014

Trade name: Electric Motor Cleaner

(Contd. of page 9)

· TLV (Threshold Limit Value established by ACGIH)

79-01-6 trichloroethylene

A2

· NIOSH-Ca (National Institute for Occupational Safety and Health)

All ingredients are listed.

· OSHA-Ca (Occupational Safety & Health Administration)

Substance is listed as a suspected carcinogen.

- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms





GHS07

- · Signal word Danger
- · Hazard-determining components of labeling:

trichloroethylene

Stoddard solvent

· Hazard statements

Causes skin irritation.

Causes serious eye irritation.

May cause genetic defects.

May cause cancer.

May cause drowsiness or dizziness.

May be fatal if swallowed and enters airways.

· Precautionary statements

Avoid breathing dust/fume/gas/mist/vapours/spray.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Specific treatment (see on this label).

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- · National regulations:
- · Information about limitation of use:

Workers are not allowed to be exposed to this hazardous material. Exceptions can be made by the authorities in certain cases.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing MSDS: Environment protection department.
- · Contact: Product Safety Department
- · Date of preparation / last revision 6/26/2014
- · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

(Contd. on page 11)

Printing date 06/26/2014 Reviewed on 06/26/2014

Trade name: Electric Motor Cleaner

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU) LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

(Contd. of page 10)

USA