Printing date 11/07/2014 Reviewed on 02/17/2014

1 Identification

· Product identifier

· Trade name: Windshield De-Icer

· Article number: 7033 PK

· 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



GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.



GHS08 Health hazard

STOT SE 1 H370 Causes damage to organs.



GHS07

Acute Tox. 4 H332 Harmful if inhaled.

· Additional information:

This product contains Methanol (Methyl Alcohol) which is toxic by ingestion, skin absortion and inhalation especially to humans and other primates. It causes permanent blindness, neurological damage and damage to various internal organs most noteably the kidneys. It cannot be made non-poisonous. Appropriate caution is therefore advised in its use with the wearing of requisite personal protective equipment, adequate ventilation in use and prompt removal of product from exposed skin by rinse off with copious quantities of water.

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







GHS02 GH

GHS07

GHS08

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

(Contd. on page 2)

Printing date 11/07/2014 Reviewed on 02/17/2014

Trade name: Windshield De-Icer

(Contd. of page 1)

· Hazard statements

Highly flammable liquid and vapor.

Harmful if inhaled.

Causes damage to organs.

· Precautionary statements

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Use explosion-proof electrical/ventilating/lighting/equipment.

Do not breathe dust/fume/gas/mist/vapours/spray.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Store locked up.

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

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



Health = 4 Fire = 3Reactivity = 0

· HMIS-ratings (scale 0 - 4)



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

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · **Description:** Mixture of the substances listed below with nonhazardous additions.

	· Dangerous o	components:	
Ī	67-56-1	methanol	10-25%
	66455-15-0	C10-12 6 Mole Linear Alcohol Ethoxylate	≤ 2.5%

4 First-aid measures

- · Description of first aid measures
- · General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· 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 rinse with water.
- · After eye contact: Remove contact lenses if able to do so.

(Contd. on page 3)

Printing date 11/07/2014 Reviewed on 02/17/2014

Trade name: Windshield De-Icer

(Contd. of page 2)

· After swallowing:

Do not induce vomiting; immediately call for medical help.

Seek immediate medical advice.

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

· Most important symptoms and effects, both acute and delayed

Nausea

Dizziness

Unconsciousness

Sensitivity to light

Methaemoglobinaemia

Headache

· Danger

Danger of convulsion.

Danger of cerebral edema.

Causes Permanent Blindness

Causes Internal Organ Damage, Kidneys.

· Indication of any immediate medical attention and special treatment needed

Administration of beverage alcohol, (Ethanol / EthylAlcohol) may be partially antidotal in cases of Methanol Poisoning, this treatment should be given only under medical supervision or on the advice of a doctor.

If swallowed, gastric irrigation with added, activated carbon.

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

Medical supervision for at least 48 hours.

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

Formation of toxic gases is possible during heating or in case of fire.

- · Advice for firefighters
- · Protective equipment:

Wear fully protective suit.

Mouth respiratory protective device.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

· Environmental precautions:

Do not allow product to reach sewage system or any water course.

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

Dilute with plenty of water.

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.

(Contd. on page 4)

Printing date 11/07/2014 Reviewed on 02/17/2014

Trade name: Windshield De-Icer

See Section 13 for disposal information.

(Contd. of page 3)

7 Handling and storage

· Precautions for safe handling

Store in cool, dry place in tightly closed receptacles.

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect from heat.

Protect against electrostatic charges.

- · 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:

Store away from oxidizing agents.

Store away from foodstuffs.

· Further information about storage conditions:

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

· 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:

67-56-1 methanol

PEL Long-term value: 260 mg/m³, 200 ppm

REL Short-term value: 325 mg/m³, 250 ppm

Long-term value: 260 mg/m³, 200 ppm

Skin

TLV Short-term value: 328 mg/m³, 250 ppm

Long-term value: 262 mg/m³, 200 ppm

Skin; BEI

· Ingredients with biological limit values:

67-56-1 methanol

BEI 15 mg/L

Medium: urine Time: end of shift

Parameter: Methanol (background, nonspecific)

· Additional information: The lists that were valid during the creation were used as basis.

(Contd. on page 5)

Printing date 11/07/2014 Reviewed on 02/17/2014

Trade name: Windshield De-Icer

(Contd. of page 4)

- · 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.

· 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.

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

· Material of gloves

Neoprene gloves

PVC or PE gloves

Butyl rubber, BR

Nitrile rubber, NBR

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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· 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:

Strong gloves

Leather gloves

· Eye protection:



Tightly sealed goggles

· Body protection: Solvent resistant protective clothing

9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Liquid
Color: Blue
Odor: Alcohol-like
Odour threshold: Not determined.

• pH-value at 20 °C (68 °F): 7.5

· Change in condition

Melting point/Melting range: Undetermined.

(Contd. on page 6)

Printing date 11/07/2014 Reviewed on 02/17/2014

Trade name: Windshield De-Icer

	(Contd. of page
Boiling point/Boiling range:	98 °C (208 °F)
· Flash point:	11 °C (52 °F)
Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	455 °C (851 °F)
Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product is not explosive. However, formation of explosive air/vapo mixtures are possible.
Explosion limits:	
Lower:	5.5 Vol %
Upper:	44.0 Vol %
· Vapor pressure at 20 °C (68 °F):	128 hPa (96 mm Hg)
· Density at 20 °C (68 °F):	0.9 g/cm³ (7.511 lbs/gal)
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	
Water:	Fully miscible.
· Partition coefficient (n-octanol/wate	e r): Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	18.5 %
Water:	80.1 %
VOC content:	19.9 %
	166.2 g/l / 1.39 lb/gl
· Other information	No further relevant information available.

10 Stability and reactivity

- $\cdot \textit{Reactivity}$
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions

Reacts with strong acids and oxidizing agents.

Flammable.

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

Formaldehyde

Carbon monoxide and carbon dioxide

Printing date 11/07/2014 Reviewed on 02/17/2014

Trade name: Windshield De-Icer

(Contd. of page 6)

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

· LD/LC50 values that	are relevant for	classification:
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67-56-1 methanol

 Oral
 LD50
 5628 mg/kg (rat)

 Dermal
 LD50
 15800 mg/kg (rabbit)

- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: Irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information: Harmful
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

1

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

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

- · 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.

(Contd. on page 8)

Printing date 11/07/2014 Reviewed on 02/17/2014

Trade name: Windshield De-Icer

 $\cdot \textbf{Recommended cleansing agent:} \ \textit{Water, if necessary with cleansing agents}.$

(Contd. of page 7)

Transport information	
UN-Number	
DOT, IMDG, IATA	UN1230
UN proper shipping name	
DOT	Methanol, mixture
IMDG, IATA	METHANOL, mixture
Transport hazard class(es)	
DOT	
RAMABLE LOUD TOXIC	
Class	3 Flammable liquids
Label	3+6.1
IMDG, IATA	
Class	3 Flammable liquids
Label	3+6.1
Packing group	
DOT, IMDG, IATA	II
Environmental hazards:	
Marine pollutant:	No
Special precautions for user	
Danger code (Kemler):	336
EMS Number:	F-E,S-D
Transport in bulk according to Annex	
MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
DOT	
Quantity limitations	On passenger aircraft/rail: 1 L
	On cargo aircraft only: 60 L
IMDG	
Limited quantities (LQ)	IL
Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
UN ''Model Regulation'':	UN1230, Methanol, mixture, 3 (6.1), II

Printing date 11/07/2014 Reviewed on 02/17/2014

Trade name: Windshield De-Icer

(Contd. of page 8)

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):

67-56-1 methanol

· TSCA (Toxic Substances Control Act):

67-56-1 methanol

66455-15-0 C10-12 6 Mole Linear Alcohol Ethoxylate

7732-18-5 water, distilled, conductivity or of similar purity

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

None of the ingredients is listed.

· 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:

67-56-1 methanol

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

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

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

None of the ingredients is listed.

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







GHS02

GHS07

11502 011507

· Signal word Danger

· Hazard-determining components of labeling:

methanol

· Hazard statements

Highly flammable liquid and vapor.

Harmful if inhaled.

Causes damage to organs.

· Precautionary statements

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

Printing date 11/07/2014 Reviewed on 02/17/2014

Trade name: Windshield De-Icer

(Contd. of page 9)

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Use explosion-proof electrical/ventilating/lighting/equipment.

Do not breathe dust/fume/gas/mist/vapours/spray.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Store locked up.

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

· 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.
- · Date of preparation / last revision

11/07/2014 / -

02/17/2014

· 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

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified 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

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Acute Tox. 4: Acute toxicity, Hazard Category 4

STOT SE 1: Specific target organ toxicity - Single exposure, Hazard Category 1

-USA