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Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 11/02/2015 Reviewed on 11/02/2015

1 Identification

- · Product Identifier
- · Trade name: Windshield Washer Fluid 0°F
- · Product Number: ngt-DPZ001
- Relevant identified uses of the substance or mixture and uses advised against:

Windshied Wash Fluid Concentrate, use at 5 parts water to 1 part LF6x to make 20F freeze point fluid

- · Product Description PC4 Anti-Freeze and de-icing products
- · Details of the Supplier of the Safety Data Sheet:
- · Manufacturer/Supplier:

NuGeneration Technologies, LLC (dba NuGenTec)

1155 Park Avenue, Emeryville, CA 94608

salesteam@nugentec.com

1-888-996-8436 or 1-707-820-4080 for product information

· Emergency telephone number:

PERS Emergency Response: Domestic and Canada - 1-800-633-8253, International 1-801-629-0667

2 Hazard(s) Identification

· Classification of the substance or mixture:



GHS08 Health hazard

STOT SE 2 H371 May cause damage to organs.

Flam. Liq. 4 H227 Combustible liquid.

- · Label elements:
- · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms:



GHS08

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

Methanol

· Hazard statements:

Combustible liquid.

May cause damage to organs.

· Precautionary statements:

Keep away from flames and hot surfaces. - No smoking.

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

Wear protective gloves / eye protection / face protection.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

In case of fire: Use for extinction: CO2, powder or water spray.

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IF exposed or concerned: Call a POISON CENTER/doctor.

Store locked up.

Store in a well-ventilated place. Keep cool.

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)



Health = *2Fire = 2

Reactivity = 0

· Hazard(s) not otherwise classified (HNOC): None known

3 Composition/Information on Ingredients

7732-18-5 Water, distilled water, deionized water

70-90%

• **Description:** Mixture: consisting of the following components.

· Dangerous Components:

CAS: 67-56-1

RTECS: PC 1400000

Methanol ♠ Flam. Liq. 2, H225; ♦ Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; ♦ STOT SE 1, H370

25-50%

4 First-Aid Measures

- · Description of first aid measures:
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- · After eve contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If swallowed and symptoms occur, consult a doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed:

No further relevant information available.

· Indication of any immediate medical attention and special treatment needed:

No further relevant information available.

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. (Contd. on page 3)



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· Special hazards arising from the substance or mixture:

Combustible liquid. Vapors can travel to a source of ignition and flash back. Explosive mixtures may occur at temperatures at or above flashpoint.

- · Advice for firefighters:
- · Protective equipment:

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

6 Accidental Release Measures

- · Personal precautions, protective equipment and emergency procedures: Not required.
- · Environmental precautions:

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 (i.e. sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

Dispose of the collected material according to regulations.

· 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.

7 Handling and Storage

- Handling
- · Precautions for safe handling:

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

- · Information about protection against explosions and fires: Protect from heat.
- · Conditions for safe storage, including any incompatibilities:
- Storage
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: 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 section 7.

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· Control parameters:

· Components with occupational exposure limits:

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

urine

end of shift

Methanol (background, nonspecific)

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

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

- · Breathing equipment: Not required.
- · Protection of hands: Not required.
- · Material of gloves: Not required.
- · Penetration time of glove material: Not applicable.
- · Eye protection:



Goggles recommended during refilling.

9 Physical and Chemical Properties

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

Form: Liquid Bluish Color: · Odor: Alcohol-like · Odor threshold: Not determined.

· pH-value @ 20 °C (68 °F): 7

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· Change in condition

Melting point/Melting range:
Boiling point/Boiling range:Not determined.
64 °C (147 °F)Flash point:39 °C (102 °F)Flammability (solid, gaseous):Not applicable.

Ignition temperature: 464 °C (867 °F)
 Decomposition temperature: Not determined.

· **Auto igniting:** Product is not self-igniting.

• Danger of explosion: Product is not explosive. However, formation of explosive air/

vapor mixtures are possible.

· Explosion limits:

Lower: 5.5 Vol % **Upper:** 44.0 Vol %

· **Vapor pressure @ 20 °C (68 °F):** 128 hPa (96 mm Hg)

• **Density @ 20 °C (68 °F):** 0.945 g/cm³ (7.886 lbs/gal)

Relative density: Not determined.
Vapor density: Not determined.
Evaporation rate: Not determined.

· Solubility in / Miscibility with:

Water: Fully miscible.

• Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

Dynamic @ **20** °**C** (**68** °**F**): 1 mPas

Kinematic: Not determined.

· Solvent content:

 Organic solvents:
 29.9 %

 Water:
 70.1 %

 VOC content:
 29.9 %

· Other information: No further relevant information available.

10 Stability and Reactivity

- · Reactivity: No further relevant information available.
- · Chemical stability: Stable under normal conditions.
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions: No dangerous reactions known.
- · Conditions to avoid: No further relevant information available.
- · Incompatible materials: No further relevant information available.

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· Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological Information

- · Information on toxicological effects:
- · Acute toxicity:
- · LD/LC50 values that are relevant for classification:

67-56-1 Methanol

Oral	LD50	5628 mg/kg (rat)
Dermal	LD50	15800 mg/kg (rabbit)
Inhalative	LC50/4 h	128.2 mg/l (rat)
	LC50/96 hours	15400 mg/l (Trout)

- · Primary irritant effect:
- · On the skin: No irritating effect.
- · On the eye: No irritating effect.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

- · Carcinogenic categories:
- · IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

· NTP (National Toxicology Program):

None of the ingredients are listed.

· OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

12 Ecological Information

- · Toxicity:
- · Aquatic toxicity:

67-56-1 Methanol

EC50 22000 mg/l (Green algae) 10000 mg/l (daphnia)

- · 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.
- · Additional ecological information:
- · General notes:

Do not allow undiluted product or product that has not been neutralized to reach ground water, water course or sewage system.

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- · 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.

Observe all federal, state and local environmental regulations when disposing of this material.

UN1993

Flammable liquids, n.o.s. (Methanol)

UN1993 Flammable liquids, n.o.s. (Methanol)

FLAMMABLE LIQUID, N.O.S. (METHANOL)

- Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport Information

· UN-Number:

· DOT, ADR, IMDG, IATA

UN proper shipping name:

· DOT

· ADR

· IMDG, IATA

· Transport hazard class(es):

· DOT



· Class: 3 Flammable liquids

· Label:

· ADR



· Class: 3 (F1) Flammable liquids

· Label:

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· IMDG, IATA



· Class: 3 Flammable liquids

· Label:

· Packing group:

· DOT, ADR, IMDG, IATA ///

· Environmental hazards: Not applicable.

· Special precautions for user: Warning: Flammable liquids

Danger code (Kemler):EMS Number:F-E,S-E

· Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code: Not applicable.

· Transport/Additional information:

· DOT

· **Quantity limitations:** On passenger aircraft/rail: 60 L

On cargo aircraft only: 220 L

· ADR

· Excepted quantities (EQ): Code: E1

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml

· IMDG

· Limited quantities (LQ): 5L

Excepted quantities (EQ): Code: E1

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml

UN "Model Regulation": UN 1993 FLAMMABLE LIQUIDS, N.O.S. (METHANOL),

3, 111

15 Regulatory Information

· Safety, health and environmental regulations/legislation specific for the substance or mixture:

· SARA (Superfund Amendments and Reauthorization):

· Section 355 (extremely hazardous substances):

None of the ingredients are listed.

· Section 313 (Specific toxic chemical listings):

67-56-1 Methanol

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

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· California Proposition 65:

· Chemicals known to cause cancer:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

67-56-1 Methanol

· Carcinogenic categories:

· EPA (Environmental Protection Agency):

None of the ingredients are listed.

· TLV (Threshold Limit Value established by ACGIH):

None of the ingredients are listed.

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

None of the ingredients are listed.

· GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms:



· Signal word: Warning

· Hazard-determining components of labeling:

Methanol

· Hazard statements:

Combustible liquid.

May cause damage to organs.

· Precautionary statements:

Keep away from flames and hot surfaces. - No smoking.

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

Wear protective gloves / eye protection / face protection.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

In case of fire: Use for extinction: CO2, powder or water spray.

IF exposed or concerned: Call a POISON CENTER/doctor.

Store locked up.

Store in a well-ventilated place. Keep cool.

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

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Trade name: Windshield Washer Fluid 0°F

National regulations: The product is subjet hazardous substances	ubject to be classified according with the latest version of the regulations on		
· State Right to Know:			
CAS: 7732-18-5	Water, distilled water, deionized water	70-90%	
	Methanol ♠ Flam. Liq. 2, H225; ♠ Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; ♠ STOT SE 1, H370	25-50%	
CAS: 57-55-6 RTECS: TY 2000000	Propylene Glycol Skin Irrit. 2, H315; Eye Irrit. 2B, H320	≤2,5%	
CAS: 94277-77-7	Blue Dye	≤2,5%	
All ingredients are listed.			

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

16 Other Information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

- · Date of preparation / last revision: 11/02/2015 / 1
- · Abbreviations and acronvms:

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

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

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

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

Flam. Liq. 4: Flammable liquids, Hazard Category 4 Acute Tox. 3: Acute toxicity, Hazard Category 3

STOT SE 1: Specific target organ toxicity - Single exposure, Hazard Category 1 STOT SE 2: Specific target organ toxicity - Single exposure, Hazard Category 2

· * Data compared to the previous version altered.

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