



SAFETY DATA SHEET

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

Duragard® -25F Winter Windshield Wash

Product Use: All proper and legal purposes

Product Number(s): 55 Gal.-W/W55gallon-25, Tote-W/Wbulktole-25

Synonyms: Duragard® -25F Window Wash, Duragard® Window Wash, Duragard® Winter Window Wash

Company Identification

Advantage Dist. & Lubricants, LLC

3434 Marion RD SE

Rochester, MN 55904

United States of America

www.advantagelubes.com

Transportation Emergency Response

CHEMTREC: (800) 424-9300 US, Canada, or U.S. Virgin Islands or (703) 527-3887 all other areas.

Health Emergency

Poison Control Center: Located in the USA. 1-800-222-1222

Product Information

email: info@advantagelubes.com

Product Information: (800) 420-1414, (507) 289-5555 local

SDS Requests: (800) 420-1414, (507) 289-5555 local

SECTION 2: Hazards identification

Classification of the substance or mixture

Flammable Liquids	Category 3
Skin corrosion/irritation	Category 5
Inhalation toxicity	Category 5
Oral toxicity	Category 5
Specific target organ toxicity, single exposure	Category 1

Environmental hazards

Not classified.

OSHA defined hazards

CFR 1910.1200).

The material is considered hazardous by the OSHA Hazard Communication Standard (29

Label elements GHS Hazard

Symbols



Signal Word

Danger: Methanol

Hazard Statements

Highly flammable liquid and vapor. May be harmful if swallowed. May be harmful if inhaled. May cause skin irritation, Causes damage to organs: liver, kidneys, central nervous system and optic nerve.

Precautionary Statements

Prevention

Do not breathe mist. Wear protective gloves/protective clothing/ eye protection/face protection. Take off contaminated clothing and wash before use. Store away from heat and ignition sources. Keep away from oxidizing materials and strong acids.

Response

If on skin (or hair): Wash with soap and water. Get medical attention if irritation develops. Cold water may be used.

If swallowed: Do NOT induce vomiting unless directed to do so by a medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

If in eyes: Check for and remove contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 30 minutes. Cold water may be used. Get medical attention immediately.

If exposed or concerned, immediately call a poison center/doctor.

Storage

Store in a well-ventilated place. Keep container tightly closed.

Disposal

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

Hazards not otherwise classified (HNOC)

Product is stable.

SECTION 3: Composition/information on ingredients

Substance/mixture: Mixture

Chemical name: N/A

Other means of identification: No

CAS number/other identifiers

Chemical Name	%	CAS #	GHS Classification
METHANOL	32-35	67-56-1	

SECTION 4: First aid measures

Description of first aid measures

Inhalation

Bring accident victims out into the fresh air. Call a physician immediately in severe cases or if recovery is not rapid.

Eyes

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 30 minutes. Cold water may be used. Get medical attention immediately.

Skin Contact

After contact with skin, wash immediately with plenty of water. Remove contaminated clothing and wash before reuse.

Ingestion

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms and effects, both acute and delayed Potential acute health effects. **Eye contact:** Can cause irritation to eyes and mucous membranes. **Inhalation:** Sore throat, shortness of breath, coughing and congestion.

Skin contact: Irritation, itching, dermatitis. **Ingestion:** Irritating to mucous membranes.

Indication of any immediate medical attention and special treatment needed

Notes to physician: Exposure may aggravate acute or chronic asthma, emphysema and bronchitis.

Specific treatments

N/A

Protection of first-aiders

N/A

See toxicological information (Section 11)

SECTION 5: Firefighting measures

Extinguishing media

Suitable and Unsuitable

SMALL FIRE: Use DRY chemical powder, CO2 or appropriate foam. LARGE

Extinguishing Media:

FIRE: Use water spray, fog or foam. Do not use water jet. Unsuitable extinguishing media: None known.

Special hazards arising from

Vapors may travel back to ignition source. Closed containers exposed to heat may

the substance or mixture explode. Hazardous thermal decomposition products/Products of combustion. Products of combustion are carbon oxides (CO, CO₂).

Special protective equipment and precautions for firefighters Do not release runoff from fire control methods to sewers or waterways.

Firefighting equipment/instructions In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

Methods and materials for containment and cleaning up Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including: the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits. Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Shut off ignition sources; including electrical equipment and flames. Do not allow smoking in the area.

SECTION 7: Handling and storage

Precautions for safe handling Keep away from heat, sparks, open flames, hot surfaces.
– No smoking.
Keep container tightly closed. Ground or bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting, etc. equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust, fumes, gas, mist, vapors or spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves, clothing, and eye and face protection.

Conditions for safe storage, including any incompatibilities Keep container tightly closed in a cool, well-ventilated place. Keep cool. Keep in an area suitable for flammable liquids..

SECTION 8: Exposure controls/personal protection

Occupational Exposure Limits

Ingredient name	Exposure limits			
	ACGIH		OSHA	
	(TWA)	(STEL)	(TWA)	(STEL)
Methanol	200 ppm	250 ppm	200 ppm; 260 mg/m ³	N/A

Appropriate engineering controls and Environmental exposure controls

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

Individual protection measures

Hygiene measures

Wash hands before eating, drinking, smoking and using the toilet. Launder contaminated clothing before re-use.

Eye/face protection: Use chemical safety goggles.

Skin protection

Hand protection and Body protection: Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Other skin protection

Wash hands and other exposed areas with mild soap and water before eating or drinking.

Respiratory protection: No respiratory protection required under normal circumstances.

Respirator Type(s) (NIOSH Approved): If the exposure limit is exceeded and engineering controls are not feasible, a half face piece particulate respirator (NIOSH type N95 or better filters) may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full face piece particulate respirator (NIOSH type N100 filter) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. If oil particles (e.g. lubricants, cutting fluids, Glycerin, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full face piece positive-pressure, air-supplied respirator. **WARNING:** Air-purifying respirators do not protect workers in Oxygen- deficient atmospheres.

SECTION 9: Physical and chemical properties

Appearance

Physical State	Liquid
Form	Liquid
Color	Blue
Odor	Alcohol
Odor threshold	Not determined
pH	8.0
Specific Gravity	0.949
Melting point/Freezing point	-25.6°F (-32 °C)
Initial boiling point and boiling range	188.6°F (87 °C) estimated
Flash Point	91.4 °F (33°C)
Evaporation Rate	(BuAc=1): 2.1
Flammability (solid, gas)	Yes
Upper/lower explosive (flammability) limits	
Explosive limit – lower (%)	6% estimated
Explosive limit – upper (%)	36% estimated (Methanol)
Vapor Pressure	128 hPa at 20°C (Methanol)
Vapor Density (Air=1)	1.11
Solubility(ies)	
Solubility (water)	Yes
Partition coefficient (n-octanol/water)	Not Established
Auto-ignition temperature	Not Applicable
Decomposition temperature	Not Established
Viscosity	Not Determined
VOC%	34%

SECTION 10: Stability and reactivity

Reactivity Stable under recommended storage conditions.

Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Will not occur
Conditions to avoid	Temperatures above the flash point and avoid excessive heat, open flame or other sources of ignition.
Incompatible materials	Strong acids, strong bases, strong oxidizing agents, strong reducing agents, magnesium, water, reactive materials.
Hazardous decomposition	Will not occur

SECTION 11: Toxicological information

Information on toxicological effects Acute toxicity

Product/ingredient name	Test	Results
Methanol	Acute toxicity, oral (male rat)	LD50 = 7,300 mg/kg
	Acute toxicity, dermal	LD50 = 15,800 mg/kg
	Acute toxicity, inhalation (rat)	LC50 Rat: 87.5 mg/l 6.00 Hours

Summary Comments:

Sensitization

Product/ingredient name	Test	Results
Methanol		No evidence of sensitization effect

Summary Comments:

Carcinogenicity

Product/ingredient name	Test	Results
Methanol		No known carcinogenic effects

Summary Comments:

Specific target organ toxicity (single exposure)

Product/ingredient name	Test	Results
Methanol	STOT-one-time exposure-oral	>5,000 mg/kg
	STOT-one-time exposure-dermal	>20,000 mg/kg
	STOT-one-time exposure-inhalation	>20,000 mg/kg

Summary Comments:

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Test	Results
Methanol	RfD-oral 0.5 mg/kg	Daily Exposure

Summary Comments:

Liver damage when RfD oral ingestion is exceeded daily.

Aspiration hazard

Product/ingredient name	Test	Results
Methanol	Human exposure studies	Tolerance at 200 ppm/40 hours

Summary Comments:

Information on the likely routes of exposure

Inhalation may blur vision. Ingesting may irritate the gastrointestinal tract.

Potential acute health effects

Eye contact: Irritating to the eyes.

Inhalation: Acute exposure of humans to methanol by inhalation or ingestion may result in visual disturbances, such as blurred or dimness of vision, leading to blindness. Neurological damage, specifically permanent motor dysfunction, may also result.

Skin contact: Contact of skin with methanol can produce mild dermatitis in humans.

Ingestion: Tests involving acute exposure of rats, mice, and rabbits have demonstrated methanol to have low acute toxicity from oral exposure.

Symptoms related to the physical, chemical and toxicological

characteristics Eye contact: Eye irritation.

Inhalation: Blurred vision.

Skin contact: Skin irritation.

Ingestion: May irritate the gastrointestinal tract, cause nausea, and vomiting.

Potential chronic health effects (Methanol and Ethylene

Glycol) Carcinogenicity: No known carcinogens.

Mutagenicity: No data available.

Teratogenicity: No data available

Developmental effects: No data available.

Fertility effects: No data available.

Numerical measures of toxicity: Acute toxicity estimates

Toxic by inhalation, in contact with skin and if swallowed. Amounts as small as 30-250 mL of pure methanol may be fatal.

SECTION 12: Ecological information

Toxicity

Acute Fish toxicity: (Methanol)

LC50 - Oncorhynchus mykiss (rainbow trout) - 19,000 mg/l - 96 h

LC50 - Lepomis macronchirus (Bluegill) - 15,400 mg/l - 96 h

Acute toxicity for daphnia: (Methanol)

EC50 - Daphnia magna (Water flea) - 24,500 mg/l - 48 h

EC100 - Daphnia magna (Water flea) - 10,000 mg/l - 24 h

Acute toxicity for daphnia: (Ethylene Glycol)

EC50 - Daphnia magna (Water flea) - 74,000 mg/l - 48 h

Acute toxicity for algae: (Methanol)

EC50 - Scenedesmus capricornutum (fresh water algae) - 22,000 mg/l - 96 h

Acute bacterial toxicity: (Methanol and Ethylene Glycol)

No data available.

Ecotoxicology Assessment: (Methanol)

Material is expected to be slightly toxic to aquatic life.

Persistence and degradability

Biodegradability: (Methanol and Ethylene Glycol)

When released into the soil, this material is expected to readily biodegrade. When released into water, this material is expected to readily biodegrade. When released into the air, this material is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals.

Stability in water: (Methanol and Ethylene Glycol)

When released into the soil, methanol is expected to quickly evaporate. When released into the soil, these materials are expected to leach into groundwater.

Photodegradation: (Methanol and Ethylene Glycol)

No data available.

Volatility (Henry's Law constant): (Methanol)

Partition coefficient n-octanol/water ($\log K_{ow}$) = -0.77

Bioaccumulative potential**Bioaccumulation: (Methanol)**

Bioaccumulation Cyprinus carpio (Carp) - 72 d at 20°C

Bioconcentration factor (BCF): 1.0

Mobility in soil: (Methanol) Distribution among environmental compartments:

When released into the soil, methanol is expected to quickly evaporate. When released into the soil, this material is expected to leach into groundwater. Ethylene glycol is water soluble and may spread in water systems.

Other adverse effects:

When released into the water, this material is expected to have a half-life between 1 and 10 days. When released into the air, this material is expected to exist in the aerosol phase with a short half-life. When released into air, this material is expected to have a half-life between 10 and 30 days. When released into the air, this material is expected to be readily removed from the atmosphere by wet deposition.

SECTION 13: Disposal considerations

Disposal instruction Dispose of contents/container in accordance with local/regional/national/international regulations, laws, ordinances and statues.

SECTION 14: Transport information**DOT**

UN Number: UN1993

Proper Shipping Name: METHANOL

Transport hazard class(es): 3

Packing Group: III

Land Transport ADR/RID and GGVS/GGVE (Cross Border / Domestic)

Transport Hazard Class(es): 3

Maritime Transport IMDG/GGVSea

Transport Hazard Class(es): 3,6.1

Marine Pollutant: No

Air Transport ICAO-TI and IATA-DGR

Transport Hazard Class(es): 3,6.1

SECTION 15: Regulatory information

Chemical Inventory Status-Part 1

Ingredient (CAS#)	TSCA	EC	Japan	Australia
Methanol (67-56-1)	Yes	Yes	Yes	Yes

Chemical Inventory Status-Part 2

Ingredient (CAS#)	Korea	Canada	Canada	Philippines
		DSL	NDSL	
Methanol (67-56-1)	Yes	Yes	No	Yes

Federal, State & International Regulations-Part 1

Ingredient (CAS#)	SARA		SARA	
	RQ	TPQ	List	Category
Methanol (67-56-1)	No	No	Yes	No

Federal, State & International Regulations-Part 2

Ingredient (CAS#)	RCR		TSCA
	CERCL	261.33	8(d)
Methanol (67-56-1)	5000 lb.	U154	No

Chemical Weapons Convention: No

TSCA 12b: No

CDTA: No

SARA 311/312:

Acute: Yes, Chronic: Yes, Fire: Yes, Pressure: No,

Reactivity: No Mixture/Liquid

Australian Hazchem Code: 2PE

Poison Schedule: No information found

SECTION 16: Other information

Revision Date 08/15/2016

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Version # 1a

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