

GH BERLIN WINDWARD SAFETY DATA SHEET



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Safety Data Sheet

Section 1: Identification

Product Identifier

Detergent

Product Name

Trade Name: Naviguard -20°F Windshield Washer Fluid

PN (Part number): 00044-35R

Relevant identified uses of the substance or mixture and uses advised against

- Material for industrial applications
- Industrial and professional use
- Consumer end use

Details of the supplier of the safety data sheet

Manufacturer

SPLASH Products

51 E. Maryland Ave.

St. Paul, MN 55117

Phone: (651) 489-8211

Emergency telephone number

1-800-535-5053

Section 2: Hazard(s) Identification

OSHA/HCS status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

Flammable liquid, Category 3

Acute toxicity, Oral Category 5

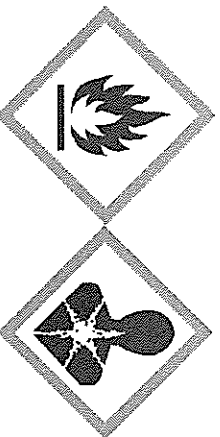
Acute toxicity, Inhalation Category 5

Acute toxicity, Dermal Category 5

Specific Target Organ Toxicity (STOT) following single exposure, Category 1

GHS label elements

Hazard pictograms



Signal word-DANGER

Methanol

Hazard statements

Flammable liquid and vapor

May be harmful if swallowed



May be harmful if inhaled

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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 SWALLOWED: 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.

IF ON SKIN (or hair): Wash with soap and water. Get medical attention if irritation develops. Cold water may be used.

IF IN 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.

IF EXPOSED or CONCERNED:

Immediately call a POISON CENTER or a doctor/physician.

Storage

Store in a well-ventilated place.

Disposal

Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified

Product is stable.

Section 3: Composition/Information on Ingredients

Substance/mixture:Mixture

Chemical name: Methanol

Other means of identification: No

CAS number/other identifiers

Ingredient name	%	CAS number
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Methanol	.30-32	67-56-1
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Section 4: First Aid Measurements

Description of necessary first aid measures

Eye contact: 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.

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

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/effects, acute and delayed



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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

Irritation to mucous membranes.

Indication of immediate medical attention and special treatment needed, if necessary

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: Fire Fighting Measures

Extinguishing media

Suitable extinguishing media

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

LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Unsuitable extinguishing media

None known

Specific hazards arising from the chemical

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

Hazardous thermal decomposition products/Products of combustion

Products of combustion are carbon oxides (CO, CO₂).

Special protective actions for fire fighters

Do not release runoff from fire control methods to sewers or waterways.

Special protective equipment for fire-fighters

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

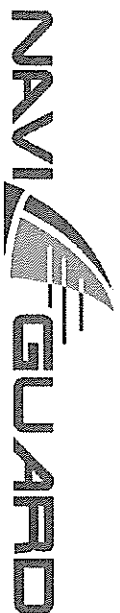
For non-emergency personnel

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.

Environmental precautions

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



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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

Protective measures, advice on general occupational hygiene and conditions for safe storage, including any incompatibilities:

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. No 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. Keep container tightly closed in a cool, well-ventilated place. Keep away from oxidizing materials and strong acids.

Store in a well-ventilated area. Keep cool. Keep in an area suitable for flammable liquids.

Section 8: Exposure Controls/Personal Protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits		
	ACGIH	OSHA	
Methanol	(TWA)	(STEL)	(TWA)
	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

None

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 facepiece positive-pressure, air-supplied respirator. **WARNING:** Air-purifying respirators do not protect workers in Oxygen-deficient atmospheres.



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Section 9: Physical and Chemical Properties

Appearance

Physical state: Blue liquid

Odor: Alcohol

Odor threshold: Not determined

pH: 8.0

Specific Gravity: 0.949

Melting point: -20°C

Boiling point: 87°C

Flash point: 33°C

Evaporation rate (BuAc=1): 2.1

Flammability (solid, gas): Yes

Lower and upper explosive (flammable) limits: LEL 6%, UEL 36%

Vapor pressure: 128 hPa at 20°C

Vapor density (Air=1): 1.11

Solubility: Soluble in water

Partition coefficient: n-octanol/water: Not Established

Auto-ignition temperature: Not Applicable

Decomposition temperature: Not Established

Viscosity: Not determined

VOC%: 31

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 oxidizing agents

Strong reducing agents

Magnesium

Water-reactive materials

Hazardous decomposition products

Will not occur.

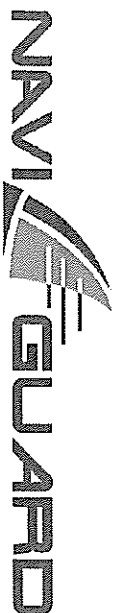
Section 11: Toxicological Information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Test
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Results



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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	Basis
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Methanol

No evidence of sensitization effect

Summary Comments:

Carcinogenicity

Product/ingredient name	Test	Results	Basis
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Methanol

No known carcinogenic effects

Summary Comments:

Specific target organ toxicity (single exposure)

Product/ingredient name	Test	Results	Basis
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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	Basis
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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	Basis
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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

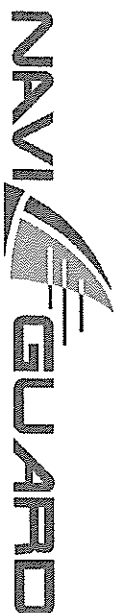
Eye contact: Eye irritation.

Inhalation: Blurred vision.

Skin contact: Skin irritation.

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

Potential chronic health effects (Methanol)



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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 macrochirus (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 algae: (Methanol)

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

Acute bacterial toxicity: (Methanol)

No data available.

Ecotoxicology Assessment: (Methanol)

Material is expected to be slightly toxic to aquatic life.

Persistence and degradability

Biodegradability: (Methanol)

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)

When released into the soil, this material is expected to quickly evaporate. When released into the soil, this material is expected to leach into groundwater.

Photodegradation: (Methanol)

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

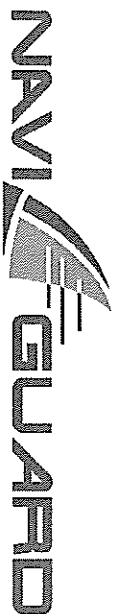
Bioconcentration factor (BCF): 1.0

Mobility in soil: (Methanol)

Distribution among environmental compartments:

When released into the soil, this material is expected to quickly evaporate. When released into the soil, this material is expected to leach into groundwater.

Other adverse effects:



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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 methods

Dispose in accordance with applicable international, national and local laws, ordinances and statutes.

Section 14: Transport Information

UN Number: N/A

DOT Proper Shipping Name: Limited Quantity, Consumer Commodity, ORM-D

Exemptions: Per 49 CFR 173.150 (pg III, inner package not over 5.0 L)

Transport hazard Class(es): N/A

Packing Group: N/A

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

Transport Hazard Class(es): N/A

Maritime Transport IMDG/GGVSea

Transport Hazard Class(es): N/A

Marine Pollutant: No

Air Transport ICAO-TI and IATA-DGR

Transport Hazard Class(es): N/A

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

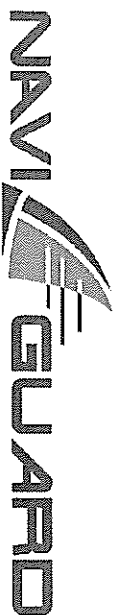
	SARA 302		SARA 313	
Ingredient (CAS#)	RQ	TPQ	List Chemical	Category
Methanol (67-56-1)	No	No	Yes	No

Federal, State & International Regulations-Part 2

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

Chemical Weapons Convention: No

TSCA 12b: No



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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

History

Date of issue: 12/18/14

Version: 1a

Revised Sections(s): New

Prepared by: Andrew Gioino, SPLASH PRODUCTS

Notice to reader

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