Safety Data Sheet

Section 1: Identification

Product Identifier

Windshield Washer Fluid

Product Name

Trade Name: SPLASH Ultimate Windshield Wash -35°F

PN (Part number): 225226

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

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: N/A

Other means of identification: No

CAS number/other identifiers

Ingredient name	%	CAS number
Methanol	32-35	67-56-1
Ethylene Glycol	<3	107-21-1

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 DELAY. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If victim is alert, rinse mouth and drink 1/2 to 1 glass of water to help dilute the material. Transport to nearest medical facility for additional treatment. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact

Splashes may cause irritation, pain, eye damage.

Inhalation

Vapor inhalation is generally not a problem unless heated or misted. Exposure to vapors over an extended time period has caused throat irritation and headache. May cause nausea, vomiting, dizziness and drowsiness. Pulmonary edema and central nervous system depression may also develop. When heated or misted, has produced rapid, involuntary eye movement and coma.

Skin contact

Irritation, itching, dermatitis.

Ingestion

Initial symptoms in massive dosage parallel alcohol intoxication, progressing to CNS depression, vomiting, headache, rapid respiratory and heart rate, lowered blood pressure, stupor, collapse, and unconsciousness with convulsions. Death from respiratory arrest or cardiovascular collapse may follow. Lethal dose in humans: 100 ml (3-4 ounces pure ethylene glycol).

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

Notes to physician

Kidney toxicity may be recognized by blood in the urine or increased or decreased urine flow. Other signs and symptoms can include nausea, vomiting, abdominal cramps, and diarrhea, lumbar pain shortly after ingestion, and possibly narcosis and death. Eye irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blurred vision. Skin irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blisters. Respiratory irritation signs and symptoms may include a temporary burning sensation of the nose and throat, coughing, and/or difficulty breathing.

Specific treatments

IMMEDIATE TREATMENT IS EXTREMELY IMPORTANT! May cause significant renal, respiratory, and CNS toxicity. May cause significant acidosis. Call a doctor or poison control center for guidance.

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, CO_2 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, CO_2).

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 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			
Methanol	ACGIH		OSHA	
	(TWA)	(STEL)	(TWA)	(STEL)
	200 ppm	250 ppm	200 ppm; 260 mg/m^3	N/A
Ethylene Glycol	ACGIH		OSHA	
	(TWA)	(STEL)	(TWA)	(STEL)
	100 ppm	N/A	100 ppm	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: Purple liquid

Odor: Alcohol

Odor threshold: Not determined

pH: 8.0

Specific Gravity: 0.949

Melting point: -35^{o}C

Boiling point: 87^{o}C

Flash point: 39^{o}C

Evaporation rate (BuAc=1): Not Determined

Flammability (solid, gas): Yes

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

Vapor pressure: 128 hPa at 20^{o}C (Methanol)

Vapor density (Air=1): 1.11 (Methanol)

Solubility: Soluble in water

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

Aldehydes

Aluminum

Hazardous decomposition products

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: 87.5 mg/l 6.00 Hours
Ethylene Glycol	Acute toxicity, oral (male rat)	LD50 = 4,700 mg/kg
	Acute toxicity, dermal	LD50 = 10,626 mg/kg
	Acute toxicity, inhalation (rat)	No Data Available

Summary Comments:

Sensitization

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

Summary Comments:

Carcinogenicity

Product/ingredient name	Test	Results	Basis
Methanol		No known carcinogenic effects	
Ethylene Glycol		No known carcinogenic effects	

Summary Comments:

Specific target organ toxicity (single exposure)

Product/ingredient name	Test	Results	Basis

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
Ethylene Glycol	Ingestion may cause drowsiness and dizziness. Inhalation of vapors or mists may cause irritation to the respiratory system.	

Summary Comments:

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Test	Results	Basis
Methanol		RfD-oral 0.5 mg/kg	Daily Exposure
Ethylene Glycol		May cause damage to organs or organ systems through prolonged or repeated exposure. Kidney: can cause kidney damage.	

Summary Comments:

Liver damage when RfD oral ingestion is exceeded daily.

Aspiration hazard

Product/ingredient name	Test	Results	Basis
Methanol	Human exposure studies		Tolerance at 200 ppm/40 hours
Ethylene Glycol	Ingestion may cause drowsiness and dizziness. Inhalation of vapors or mists may cause irritation to the respiratory system		

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: Ingestion may cause drowsiness and dizziness.

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 evidence of mutagenic activity.

Teratogenicity: May damage fertility or the unborn child.

Developmental effects: No data available.

Fertility effects: No data available.

Section 12: Ecological Information

Toxicity

Acute Fish toxicity: (Methanol)

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

Acute Fish toxicity: (Ethylene Glycol)

LC50 - Oncorhynchus mykiss (rainbow trout) – 18,500 mg/l - 96 h

Acute toxicity for daphnia: (Methanol)

EC50 - Daphnia magna (Water flea) - 24,500 mg/l - 48 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. When released into the water, this material is expected to have a half-life between 1 and 10 days.

Photodegradation: (Methanol and Ethylene Glycol)

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

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

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

Volatility (Henry's Law constant): (Ethylene Glycol)

Partition coefficient n-octanol/water (log Kow) = -1.36

Bioaccumulative potential

Bioaccumulation: (Methanol)

Bioaccumulation Cyprinus carpio (Carp) - 72 d at 20^{o}C

Bioconcentration factor (BCF): 1.0

Mobility in soil: (Methanol and Ethylene Glycol)

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 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

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

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Version: 1a

Revised Sections(s): New

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Notice to reader

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Final determination of the suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.