

Issuing Date: 1-Jun-2008 Revision Date: 6-Dec-2016 SDS Number: 9191

1. Identification of the Substance / Preparation and of the Company / Undertaking

Product identifier

Product Name RAIN-X 32 oz. Windshield Spray Deicer

Stock Number 113555; 113557 / 5075516

Other means of identification

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Windshield Deicer

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Name South/Win, Ltd Supplier Address South/Win Address South/Win, Ltd 112 Maxfield Rd.

Greensboro, NC 27405

US

Supplier Phone Number Phone: (800) 648-4393

Fax: (336) 398-5680

Emergency Telephone Number CHEMTREC: (800) 424-9300

2. Hazards Identification

Classification (GHS-US)

Flam. Liq. 2	H225
Acute Tox. 3 (Oral)	H301
Acute Tox. 3 (Dermal)	H311
Acute Tox. 3 (Inhalation)	H331



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Eye Irrit. 2A	H319
Repr. 1B	H360
STOT SE 1	H370

GHS Label elements, including precautionary statements

Emergency Overview

Signal Word Danger

Hazard Statement:

H225 - Highly flammable liquid and vapor

H301 + H311 + H331 - Toxic if swallowed, in contact with skin if inhaled.

H319 - Causes serious eye irritation

H360 - May damage fertility or the unborn child

H370 - Causes damage to organs







Appearance Clear

Physical State Liquid

Odor Alcohol odor

Precautionary Statements

- P202 Do not handle until all safety precautions have been read and understood
- P210 Keep away from heat, sparks, open flames, hot surfaces. No smoking
- P233 Keep container tightly closed.
- P240 Ground/bond container and receiving equipment
- P241 Use explosion-proof electrical, ventilating, lighting equipment
- P242 Use only non-sparking tools
- P243 Take precautionary measures against static discharge
- P261 Avoid breathing vapors
- P264 Wash hands thoroughly after handling
- P270 Do not eat, drink, or smoke when using this product
- P271 Use only outdoors or in a well-ventilated area
- P280 Wear protective gloves, protective clothing, eye protection, face protection
- P301 + P310 If swallowed; immediately call a doctor
- P303 + P361 + P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with
- P304 + P340 IF INHALED; Remove person to fresh air and keep comfortable for breathing
- P307 + P311 If exposed; call a poison center / doctor
- P330 Rinse mouth



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P361 - Take off immediately all contaminated clothing

P363 – Wash contaminated clothing before reuse

P370 + P378 - In case of fire; use water spray to extinguish

P403 + P233 - Store in well-ventilated place. Keep container tightly closed.

P405 - Store locked up

P501 – Dispose of contents/container to licensed waste management site.

Other hazards: No additional information available

Unknown acute toxicity: No data available

3. Composition / Information on Ingredients

Name: Methanol CAS No: 67-56-1 EC No. 200-659-6 EC Index No: 603-001-00-X

Chemical Name	CAS No	%	Classification (GHS-US)
Methanol	67-56-1	70 -90	Flam. Liq. 2, H225
			Acute Tox. 3 (Oral), H301
			Acute Tox. 3 (Dermal), H311
			Acute Tox. 3 (Inhalation), H331
			Eye Irrit. 2A, H319
			Repr. 1B, H360
			STOT SE 1, H370

Full text of H-phrases: See section 16

Mixture: Not applicable

4. First Aid Measures

First-aid measures general Never give anything by mouth to an unconscious person. If you feel unwell, seek

medical advice (show the label where possible). Call a POISON CENTER or doctor/physician. Methanol istoxic and flammable. Take proper precautions to ensure your own safety before attempting rescue (e.g. wear appropriate protective

equipment and remove any sources of ignition).

First-aid measures after inhalation Remove to fresh air and keep at rest in a position comfortable for breathing. If

breathing is difficult, give oxygen. Obtain medical attention.



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First-aid measures after skin contact Rinse skin with water/shower. Remove/Take off immediately all contaminated

clothing. Immediately call a POISON CENTER or doctor/physician. Wash

contaminated clothing before reuse.

First-aid measures after eye contact

Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15

minutes minimum). Remove contact lenses, if present and easy to do. Continue rinsing. Ensure that folded skin of eyelids is thoroughly washed with water. Obtain

medical attention if pain, blinking or redness persist.

First-aid measures after ingestion Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation Symptoms may include dizziness, headache, nausea and loss of coordination.

CNS depression. Metabolic acidosis and severe visual effects can occur following an 8-24 hour latent period. Coma and death, usually due to respiratory failure, may occur if medical treatment is not received. Visual effects may include reduced reactivity and/or increased sensitivity to light, blurred, double and/or

snowy vision, and blindness.

Symptoms/injuries after skin contact Repeated exposure to this material can result in absorption through skin causing

significant health hazard. Repeated and/or prolonged skin contact may cause

irritation.

Symptoms/injuries after eye contact Moderate eye irritant.

Symptoms/injuries after ingestion Ingestion of as little as 10 ml of methanol can cause blindness and 30 ml (1

ounce) can cause death if victim is not treated. Ingestion causes mild central nervous system (CNS) depression with nausea, headache, vomiting, dizziness, incoordination and an appearance of drunkenness. Metabolic acidosis and severe visual effects can occur following an 8-24 hour latent period. Coma and death, usually due to respiratory failure, may occur if medical treatment is not received. Visual effects may include reduced reactivity and/or increased

sensitivity to light, blurred, double and/or snowy vision, and blindness.

Chronic symptoms Has caused teratogenic and fetotoxic effects, in the absence of maternal

toxicity in animal studies.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically. The severity of outcome following methanol ingestion may be more related to the time between ingestion and treatment, rather than the amount ingested. Therefore, there is a need for rapid treatment of any ingestion exposure. Antidote is fomepizole which enhances elimination of metabolic formic acid. This must be administered by a physician only. For specialist advice physicians should contact the Poison Control Centre.



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5. Firefighting Measures

Suitable extinguishing media

Synthetic Fire Fighting foam AR-FFF (3% solution). Dry powder. Carbon dioxide. Water spray. Sand

Unsuitable extinguishing media

Do not use a heavy water stream. Water may be effective for cooling, diluting, or dispersing methanol, but may not be effective for extinguishing a fire because it will not cool methanol below its flash point. If water is used for cooling, the solution will spread if not contained. Mixtures of methanol and water at concentrations greater than 20% methanol are still considered flammable.

Special hazards arising from the substance or mixture

Fire Hazard Highly flammable liquid and vapor. Can accumulate in confined spaces, resulting in

a toxicity and flammability hazard. Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other toxic gases. Under fire conditions closed containers may rupture or explode. Flame may be invisible during the day.

The use of infrared and or heat detection devices is recommended.

Explosion hazard May form flammable/explosive vapor-air mixture.

Reactivity Stable under normal conditions.

Advice for firefighters

fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting Fire fighters should wear complete protective clothing including self-contained

breathing apparatus.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

General measures Remove ignition sources. Use special care to avoid static electric charges. No

naked lights. No smoking.

For non-emergency personnel

Protective equipment Wear suitable protective clothing, gloves and eye or face protection.

Emergency procedures Evacuate unnecessary personnel.



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For emergency responders

Protective equipment Wear suitable protective clothing and eye or face protection.

Emergency procedures Remove ignition sources. Ensure adequate ventilation. Avoid inhalation of

vapors. Avoid contact with eyes, skin, and clothing.

Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Methanol's main physical behavior if spilled to water is described as "dissolves/evaporates" in the European Behaviour Classification system for chemicals (reported in IMO (2011). GESAMP hazard profile: methanol does not bioaccumulate and is readily biodegradeable in the aquatic environment (IMO2011).

Methods and material for containment and cleaning up

Methods for cleaning up Stop leak if safe to do so. Remove all sources of ignition. Small quantities of liquid

spill: take up in non-combustible absorbent material and shovel into container for disposal. Wash spill area with soapy water. Large spills: Dike to collect large liquid spills. Alcohol resistant foams may be applied to spill to diminish vapour and fire hazard. Remove liquid by intrinsically safe pumps or vacuum equipment designed for vacuuming flammable materials (i.e. equipped with inertgases and ignition

sources controlled). Place in suitable, covered, labeled containers.

Reference to other sections

SECTION 8: Exposure controls/personal protection. SECTION 13: Disposal considerations.

7. Handling and Storage

Precautions for safe handling

Additional hazards when processed Handle empty containers with care because residual vapors are flammable.

Precautions for safe handling Wash hands and other exposed areas with mild soap and water before eating,

drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No naked lights. No smoking. Use only explosion-proof equipment. Use only non-sparking tools. Do not breathe Vapors.

Hygiene measures Do not eat, drink or smoke when using this product. Wash hands and forearms

thoroughly after handling.



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Conditions for safe storage, including any incompatibilities

Technical measures Proper grounding procedures to avoid static electricity should be followed.

Ground/bond container and receiving equipment. Use explosion-proof electrical equipment. Have appropriate fire extinguishers and spill cleanup equipment in or

near storage area.

Storage conditions Keep only in the original container in a cool, well ventilated place away from :

Ignition sources. Keep in fireproof place. Keep container tightly closed. Do not

store in confined spaces.

Storage area Store at room temperature. Keep out of direct sunlight. Store in a dry area.

Keep container in a well-ventilated place. Fireproof storeroom. Keep locked up.

Provide the tank with earthing. Unauthorized persons are not admitted.

Packaging materials SUITABLE MATERIAL: Steel. Stainless steel. Iron. Glass. MATERIAL TO AVOID:

Lead. Aluminum. zinc. Polyethylene. PVC.

Specific end use (s) Solvent, Fuel, Feedstock



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8. Exposure Controls / Personal Protection

Control parameters

Methanol (67-56-1)		
USA ACGIH	ACGIH TWA (mg/m³)	262 mg/m³
USA ACGIH	ACGIH TWA (ppm)	200 ppm
USA ACGIH	ACGIH STEL (mg/m³)	327 mg/m³
USA ACGIH	ACGIH STEL (ppm)	250 ppm
USA ACGIH	Remark (ACGIH)	Headache; eye dam; dizziness; nausea
USA OSHA	OSHA PEL (TWA) (mg/m³)	260 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	200 ppm

Exposure controls

Appropriate engineering controls Carry out operations in the open/under local exhaust/ventilation or with respiratory

protection. Both local exhaust and good general room ventilation must be provided not only to control exposure but also to prevent formation of flammable mixtures. Emergency safety showers should be available in the immediate vicinity of any

potential exposure. Use only explosion-proof equipment.

Personal protective equipment Avoid all unnecessary exposure.

Hand protection Wear Viton® /, butyl rubber gloves. Gloves must be replaced after each use and

whenever signs of wear or perforation appear. butyl rubber. Breakthrough time (maximum wearing time): > 8 hours. Viton. Breakthrough time (maximum wearing

time): 1-4 Hours. (EN374).

Eye protection Chemical goggles or safety glasses. A face shield may also be necessary. (EN166).

Skin and body protection Wear chemical resistant overall.

Respiratory protection Where exposure through inhalation may occur from use, respiratory protection

equipment is recommended. Wear a positive pressure full face self-contained

breathing apparatus or a full face supplied air respirator.

Other information Do not eat, drink or smoke during use.

9. Physical and Chemical Properties

Information on basic physical and chemical properties



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: 12.8 kPa @ 20°C

Physical state : Liquid
Appearance : Liquid
Molecular mass : 32.04 g/mol
Color : Clear
Odor : alcohol odor.
Odor threshold : 4.2 - 5960 ppm
pH : Not applicable

Relative evaporation rate (butyl acetate=1) : 4.1

Melting point : -97.8 °C

Freezing point : -97.6 °C

Boiling point : 64.7 °C

Flash point : 14.4 °C

Auto-ignition temperature : 464 °C

Decomposition temperature : Not available

Flammability (solid, gas) : No data available

Relative vapor density at 20 °C : 1.1

Relative density : 0.791 - 0.793 @ 20°C

Relative density of saturated gas/air mixture : 1.0

Specific gravity / density : 792 kg/m³

Solubility : Miscible with water.

Log Pow : 0.82

Log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : 0.8 cP (25 °C)

Explosive properties : vapors may form explosive mixture with air.

Oxidizing properties : Not oxidizing. Explosive limits : 5.5 - 36.5 vol %

Other Information

Vapor pressure

VOC content 100%

10. Stability and Reactivity

Reactivity Stable under normal conditions.

Chemical stability The product is stable under storage at normal ambient temperatures. Highly

flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

Hygroscopic.



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Conditions to avoid Direct sunlight. High temperature. Open flame. Ignition sources.

Incompatible materials Oxidizing agents. Strong acids. Strong bases. Methanol is not compatible with

gasket and O-rings materials made of Buna-N and Nitrile.

Hazardous decomposition products Carbon monoxide. Carbon dioxide. May release flammable gases. Formaldehyde.

11. Toxicological Information

Information on toxicological effects

Acute toxicity Toxic if swallowed. Toxic in contact with skin. Toxic if inhaled.

Methanol (\f)67-56-1	
LD50 oral rat	5600 mg/kg
LD50 dermal rabbit	15800 mg/kg
LC50 inhalation rat (ppm)	64000 ppm/4h rat

Skin corrosion / irritation Not classified

Based on available data, the classification criteria are not met

pH: Not applicable.

Serious eye damage / irritation Causes serious eye irritation

pH: Not applicable.

Respiratory or skin sensitization Not classified

Based on available data, the classification criteria are not met

Germ cell mutagenicity Not classified

Based on available data, the classification criteria are not met

Carcinogenicity Not classified

Based on available data, the classification criteria are not met

Reproductive toxicity May damage fertility or the unborn child.

Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure)

Causes damage to organs.

Specific target organ toxicity (repeated exposure)

Not classified

Based on available data, the classification criteria are not met

Aspiration hazard Not classified

Based on available data, the classification criteria are not met



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Potential Adverse human health effects and symptoms

Toxic if swallowed. Toxic in contact with skin.

Symptoms/injuries after inhalation Symptoms may include dizziness, headache, nausea and loss of

coordination. CNS depression. Metabolic acidosis and severe visual effects can occur following an 8-24 hour latent period. Coma and death, usually due to respiratory failure, may occur if medical treatment is not received. Visual effects may include reduced reactivity and/or increased sensitivity to

light, blurred, double and/or snowy vision, and blindness.

Symptoms/injuries after skin contact Repeated exposure to this material can result in absorption through skin

causing significant health hazard. Repeated and/or prolonged

skin contact may cause irritation.

Symptoms/injuries after eye contact Symptoms/injuries after ingestion Moderate eye irritant.

Ingestion of as little as 10 ml of methanol can cause blindness and 30 ml (1 ounce) can cause death if victim is not treated. Ingestion causes mild central nervous system (CNS) depression with nausea, headache, vomiting, dizziness, incoordination and an appearance of drunkenness. Metabolic acidosis and severe visual effects can occur following an 8-24 hour latent period. Coma and death, usually due to respiratory failure, may occur if medical treatment is not received. Visual effects may include reduced reactivity and/or increased sensitivity to light, blurred, double and/or snowy

vision, and blindness.

Chronic symptoms Has caused teratogenic and fetotoxic effects, in the absence of maternal

toxicity in animal studies.

12. Ecological Information

Toxicity

Methanol (67-56-1)		
LC50 fish	15400 - 29400 mg/l 96 h - Fish	
EC50 Daphnia > 10000 mg/l 48 h - Daphnia		
EC50 other aquatic organisms 1 22000 mg/l 72h - Selenastrum carpricornutum (Pseudokichnerela subcapita		

Persistence and degradability

Methanol (67-56-1)	
Persistence and degradability	Rapidly degradable.

Bioaccumulative potential



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Methanol (67-56-1)		
BCF fish 1 < 10 (Leuciscus idus)		
Log Pow 0.82		
Bioaccumulative potential	Bioaccumulation unlikely. Based on the n-octanol/water partition coefficient accumulation in organisms is not expected.	

Mobility in soil

Methanol (67-56-1)		
Mobility in soil	Mobile	

Other adverse effects:

Other information Avoid release to the environment.

13. Disposal Considerations

Waste treatment methods

Methanol waste should be handled and stored in a similar manner to methanol products or mixtures. Avoid release to the environment. Collect methanol waste in secure and sealable containers. Refer to section 6 and 7 for information on accidental releases, handling and storage conditions. Methanol waste shall not be mixed together with other waste. Dispose methanol waste in a safe manner in accordance with local and/or national regulations. Use qualified hazardous waste companies to transport and dispose of methanol waste. Recycle wherever possible. Large volumes may be suitable for re-distillation. Empty containers may contain hazardous residue. Never weld, cut or grind empty containers. Empty containers should be thoroughly rinsed with large quantities of clean water. Rinse water should be disposed of as methanol waste.

14. Transport Information

DOT

Proper Shipping Name CONSUMER COMMODITY

Hazard Class ORM-D

Description CONSUMER COMMODITY, ORM-D

Emergency Response 128

Guide Number



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<u>TDG</u>

UN-No. UN1230

Proper Shipping Name FLAMMABLE LIQUID, N.O.S.

Hazard Class 3,6 Packing Group II

Description UN1230, FLAMMABLE LIQUID, N.O.S.(METHYL ALCOHOL)

MEX

UN-No. UN1230

Proper Shipping Name FLAMMABLE LIQUID, N.O.S.

Hazard Class 3,6 Packing Group II

Description UN1230 FLAMMABLE LIQUID, N.O.S.(METHYL ALCOHOL)

<u>ICAO</u>

UN-No. UN1230

Proper Shipping Name FLAMMABLE LIQUID, N.O.S.

Hazard Class 3,6 Packing Group II

Description UN1230, FLAMMABLE LIQUID, N.O.S.(METHYL ALCOHOL)

<u>IATA</u>

UN-No. UN1230

Proper Shipping Name FLAMMABLE LIQUID, N.O.S.

Hazard Class 3,6 Packing Group II

Description UN1230, FLAMMABLE LIQUID, N.O.S.(METHYL ALCOHOL)

IMDG/IMO

UN-No. UN1230

Proper Shipping Name FLAMMABLE LIQUID, N.O.S.

Hazard Class 3,6
Packing Group II
EmS-No. F-E, S-E

Description UN1230, FLAMMABLE LIQUID, N.O.S.(METHYL ALCOHOL) FP 34C

RID

UN-No. UN1230

Proper Shipping Name FLAMMABLE LIQUID, N.O.S.

Hazard Class 3,6
Packing Group II
Classification code F1

Description UN1230 FLAMMABLE LIQUID, N.O.S.(METHYL ALCOHOL)

<u>ADR</u>

UN-No. UN1230

Proper Shipping Name FLAMMABLE LIQUID, N.O.S.

Hazard Class 3,6 Packing Group II



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Classification code F1

Description UN1230 FLAMMABLE LIQUID, N.O.S.(METHYL ALCOHOL)

<u>ADN</u>

UN-No. UN1230

Proper Shipping Name FLAMMABLE LIQUID, N.O.S.

Hazard Class 3,6
Packing Group || Classification code || F1

Special Provisions 274, 601, 640E

Description UN1230 FLAMMABLE LIQUID, N.O.S.(METHYL ALCOHOL)

Hazard Labels 3 Limited Quantity 5 L Ventilation VE01

15. Regulatory information

International Inventories

TSCA Complies

DSL All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Methyl alcohol - 67-56-1	67-56-1	70 -90	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No



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CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clear Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Methyl alcohol 67-56-1	5000 lb		RQ= 2270 kg final RQ RQ= 5000 lb final RQ

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65	
Methyl alcohol - 67-56-1	Developmental	

US State Right-to-know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsyl vania	Rhode Island	Illinois
Methyl alcohol 67-56-1	Х	Х	Х	Χ	Х

International Regulations

Mexico

National occupational exposure limits

Component	Carcinogen Status	Exposure Limits
Methyl alcohol		Mexico: TWA= 200 ppm
67-56-1 (15 - 40)		Mexico: TWA= 260 mg/m ³
		Mexico: STEL= 250 ppm
		Mexico: STEL= 310 mg/m ³

Mexico - Occupational Exposure Limits - Carcinogens

Canada WHMIS Hazard Class

B2 - Flammable liquid D2A - Very toxic materials D2B - Toxic materials



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16. Other Information

NFPA Health Hazards 3 Flammability 3 Instability 0 Physical and Chemical

HMIS Health Hazards 3 * Flammability 3 Physical Hazard 0 Personal Protection X

Prepared By: Randy Boitz

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet