



Safety Data Sheet

Issuing Date: 1-Jun-2008

Revision Date: 5-Mar-2015

SDS Number: 9152

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

Product identifier

Product Name Krystal Kleer +22 degree Windshield Washer Fluid

Stock Numbers 111405 / 111405-4 / 111401

Other means of identification

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Windshield Wiper Fluid

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Name South/Win, Ltd
Supplier Address 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

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Specific target organ toxicity (single exposure)	Category 1
Flammable liquids	Category 3


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GHS Label elements, including precautionary statements

Emergency Overview

Signal Word	Danger
Hazard Statement: Harmful if swallowed Harmful if contact with skin Harmful if inhaled Causes damage to organs Flammable liquid and vapor	
Appearance Blue	Physical State Liquid
	Odor Mild Alcohol

Precautionary Statements - Prevention

Wear protective gloves/protective clothing/eye protection/face protection
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area
Do not breathe dust/fume/gas/mist/vapors/spray
Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof electrical/ ventilating/ lighting/ equipment
Use only non-sparking tools
Take precautionary measures against static discharge

Precautionary Statements - Response

IF exposed: Call a POISON CENTER or doctor/physician
Specific treatment (see supplemental first aid instructions on this label)

Skin

Call a POISON CENTER or doctor/physician if you feel unwell
Wash contaminated clothing before reuse
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician if you feel unwell

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth



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Fire

In case of fire: Use CO₂, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Unknown Toxicity

0.7% of the mixture consists of ingredient(s) of unknown toxicity

Other information

PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION

Interactions with Other Chemicals

Use of alcoholic beverages may enhance toxic effects.

3. Composition / Information on Ingredients

Chemical Name	CAS No	Weight-%	Trade Secret
Methyl alcohol	67-56-1	6 - 12	*

*The exact percentage (concentration) of composition has been withheld as a trade secret

4. First Aid Measures

First aid measures

General Advice

Show this safety data sheet to the doctor in attendance.

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. If symptoms persist, call a physician.



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Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.

Inhalation

Remove to fresh air. If breathing is difficult, (trained personnel should) give oxygen. If not breathing, give artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-mouth resuscitation.

Ingestion

Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Call a physician.

Self-protection of the first aider

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and Effects Coughing and/ or wheezing. Difficulty in breathing.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Ethanol may inhibit methanol metabolism.

5. Fire-fighting Measures

Suitable Extinguishing Media

Dry chemical. Carbon dioxide (CO₂). Water spray. Alcohol resistant foam.

Unsuitable extinguishing media

CAUTION: All these products have a very low flash point. Use of water spray when fighting fire may be inefficient.

Specific Hazards Arising from the Chemical

Vapors can form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapor explosion hazard indoors, outdoors or in sewers. Runoff to sewer may create fire or explosion hazard.

Uniform Fire Code

Toxic: Liquid
Combustible Liquid: II

Hazardous Combustion Products

Carbon oxides.



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Explosion Data

Sensitivity to Mechanical Impact No.

Sensitivity to Static Discharge Yes.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area) All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Full encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. Do not breathe vapor or mist.

Other Information

Water spray may reduce vapor; but may not prevent ignition in closed spaces.

Environmental Precautions

Environmental Precautions

Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for Containment

Stop leak if you can do it without risk. A vapor suppressing foam may be used to reduce vapors. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up

Use clean non-sparking tools to collect absorbed material. Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.



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7. Handling and Storage

Precautions for safe handling

Handling

Use personal protection equipment. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. In case of insufficient ventilation, wear suitable respiratory equipment. Keep away from heat/sparks/open flames/hot surfaces. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use spark-proof tools and explosion-proof equipment.

Conditions for safe storage, including any incompatibilities

Storage

Keep in properly labeled containers. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Protect from moisture. Store away from other materials. Do not store near combustible materials.

Incompatible Products

None known based on information supplied.

8. Exposure Controls / Personal Protection

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Methyl alcohol 67-56-1	STEL = 250 ppm TWA: 200 ppm S*	TWA: 200 ppm TWA: 260 mg/m ³ (vacated) TWA: 200 ppm (vacated) TWA: 260 mg/m ³ (vacated) STEL: 250 ppm (vacated) STEL: 325 mg/m ³ (vacated) S*	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m ³ STEL: 325 mg/m ³ STEL: 250 ppm

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits Immediately Dangerous to Life or Health

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992) See section 15 for national exposure control parameters

Appropriate engineering controls



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Engineering Measures
 Showers
 Eyewash stations
 Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection Tight sealing safety goggles. If splashes are likely to occur. Face protection shield.

Skin and Body Protection Impervious gloves. Impervious clothing. Chemical resistant apron. Antistatic boots.

Respiratory Protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Keep away from food, drink, and animal feeding stuffs. Avoid contact with skin, eyes or clothing. Wash hands before breaks and immediately after handling the product. Take off contaminated clothing and wash before reuse. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area, and clothing is recommended.

9. Physical and Chemical Properties

Physical and Chemical Properties

Physical State	Liquid	Odor	Mild Alcohol
Appearance	Liquid	Odor Threshold	No information available
Color	Blue		

<u>Property</u>	<u>Values</u>	<u>Remarks</u>	<u>Method</u>
pH	7	None known	
Melting / freezing point	No data available	None known	
Boiling point / boiling range	96 °C / 205 °F	None known	
Flash Point	54 °C / 129 °F	None known	
Evaporation Rate	No data available	None known	
Flammability (solid, gas)	No data available	None known	
Flammability Limit in Air			
Upper flammability limit	No data available		
Lower flammability limit	No data available		
Vapor pressure	No data available	None known	
Vapor density	No data available	None known	
Specific Gravity	No data available	None known	
Water Solubility	Miscible in water	None known	
Solubility in other solvents	No data available	None known	
Partition coefficient: n-octanol/water	No data available	None known	
Autoignition temperature	No data available	None known	



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Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing Properties	No data available	

Other Information

Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	

10. Stability and Reactivity

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to avoid

Excessive heat. Heat, flames and sparks.

Incompatible materials

None known based on information supplied.

Hazardous Decomposition Products

Carbon oxides.

11. Toxicological Information

Information on likely routes of exposure

Product Information

Inhalation

Specific test data for the substance or mixture is not available. Harmful by inhalation. (Based on components).

Eye Contact

Specific test data for the substance or mixture is not available.



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Skin Contact Specific test data for the substance or mixture is not available. May be absorbed through the skin in harmful amounts. Harmful in contact with skin. (Based on components).

Ingestion Specific test data for the substance or mixture is not available. Harmful if swallowed. (Based on components).

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Methyl alcohol 67-56-1	= 5628 mg/kg (Rat)	-	= 83.2 mg/L (Rat) 4 h

Information on toxicological effects

Symptoms Coughing and/ or wheezing. May cause blindness.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.

Mutagenic Effects No information available.

Carcinogenicity Contains no ingredient listed as a carcinogen.

Reproductive Toxicity No information available.

STOT - single exposure Based on classification criteria from the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200), this product has been determined to cause systemic target organ toxicity from acute exposure. (STOT SE). If this product is a mixture, the classification is not based on toxicology studies for this product, but is based solely on toxicology studies for ingredients found within this product. Detailed substance and/or ingredient information may be provided in other sections of this SDS. Target organs effects listed in this document may result from a single overexposure to this product. Causes damage to organs if swallowed. Causes damage to organs in contact with skin. Causes damage to organs if inhaled.

STOT - repeated exposure No information available.

Chronic Toxicity Effects from this product caused by acute exposure may cause permanent damage to target organs and/or may cause chronic conditions. Inhalation, ingestion, or skin absorption of methanol can cause blindness.

Target Organ Effects Respiratory system. Central Nervous System (CNS). Eyes. Gastrointestinal tract (GI). Skin. Systemic Toxicity.

Aspiration Hazard No information available.

Numerical measures of toxicity Product Information



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The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 370.00 mg/kg
ATEmix (dermal) 1,111.00 mg/kg (ATE)
ATEmix (inhalation-dust/mist) 1.86 mg/l

12. Ecological Information

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Methyl alcohol 67-56-1		96h LC50: = 28200 mg/L (Pimephales promelas) 96h LC50: > 100 mg/L (Pimephales promelas) 96h LC50: 19500 - 20700 mg/L (Oncorhynchus mykiss) 96h LC50: 18 - 20 mL/L (Oncorhynchus mykiss) 96h LC50: 13500 - 17600 mg/L (Lepomis macrochirus)	EC50 = 39000 mg/L 25 min EC50 = 40000 mg/L 15 min EC50 = 43000 mg/L 5 min	

Persistence and Degradability

No information available.

Bioaccumulation

Chemical Name	Log Pow
Methyl alcohol 67-56-1	-0.77

Other adverse effects

No information available.



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13. Disposal Considerations

Waste treatment methods

Disposal methods

This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

Contaminated Packaging

Dispose of contents/containers in accordance with local regulations.

US EPA Waste Number

D001

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Methyl alcohol 67-56-1		Included in waste stream: F039		U154

California Hazardous Waste Codes

133

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste
Methyl alcohol 67-56-1	Toxic Ignitable

14. Transport Information

DOT

Proper Shipping Name

WINDSHIELD WASHER FLUID

Hazard Class

ORM-D

Description

COMBUSTIBLE LIQUID, AQUEOUS ALCOHOL SOLUTION

Emergency Response Guide Number

131

TDG

UN-No.

UN1230

Proper Shipping Name

METHANOL

Hazard Class

3

Subsidiary Class

6.1

Packing Group

II

Description

UN1230, METHANOL, 3 (6.1), II

MEX

UN-No.

UN1230

Proper Shipping Name

METHANOL

Hazard Class

3

Subsidiary Class

6.1



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Packing Group II
Description UN1230, METHANOL, 3 (6/1), II

ICAO

UN-No. UN1230
Proper Shipping Name METHANOL
Hazard Class 3
Subsidiary Class 6.1
Packing Group II
Description UN1230, METHANOL, 3 (6/1), II

IATA

UN-No. UN1230
Proper Shipping Name METHANOL
Hazard Class 3
Subsidiary Class 6.1
Packing Group II
Description UN1230, METHANOL, 3 (6/1), II

IMDG/IMO

UN-No. UN1230
Proper Shipping Name METHANOL
Hazard Class 3
Subsidiary Class 6.1
Packing Group II
EmS-No. F-E, S-D
Description UN1230, METHANOL, 3 (6.1), II (43 °C C.C.)

RID

UN-No. UN12130
Proper Shipping Name METHANOL
Hazard Class 3
Packing Group II
Classification code FT1
Description UN1230, METHANOL, 3 (6/1), II
ADR/RID- Labels 6.1

ADR

UN-No. UN1230
Proper Shipping Name METHANOL
Hazard Class 3
Packing Group II
Classification code FT1
Tunnel Restriction code (D/E)
Description UN1230, METHANOL, 3 (6/1), II
ADR/RID- Labels 6.1



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ADN

UN-No.	UN1230
Proper Shipping Name	METHANOL
Hazard Class	3
Packing Group	II
Classification code	FT1
Special Provisions	279, 802
Description	UN1230, METHANOL, 3 (6.1), II
Hazard Labels	6.1
Limited Quantity	1 L
Ventilation	VE01, VE02

15. Regulatory Information

International Inventories

TSCA	Complies
DSL	All components are listed either on the DSL or NDSL.
IECSC	-

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	6 - 12	1.0

SARA 311/312 Hazard Categories

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



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Reactive Hazard **No**

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean 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	Pennsylvania	Rhode Island	Illinois
Methyl alcohol 67-56-1	X	X	X	X	X

International Regulations

Mexico

National occupational exposure limits

Component	Carcinogen Status	Exposure Limits
Methyl alcohol 67-56-1 (10-30)		Mexico: TWA= 200 ppm Mexico: TWA= 260 mg/m ³ Mexico: STEL= 250 ppm Mexico: STEL= 310 mg/m ³

Mexico - Occupational Exposure Limits - Carcinogens



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Canada

WHMIS Hazard Class

B3 - Combustible liquid

D2B - Toxic materials



16. Other Information

NFPA	Health Hazards 3	Flammability 2	Instability 0	Physical and Chemical Hazards -
HMIS	Health Hazards 3 *	Flammability 2	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