Material Safety Data Sheet

1. MATERIAL AND COMPANY IDENTIFICATION

Material Name : **Rain-X De-Icer Aerosol**
Uses : Windshield de-icer

Manufacturer/Supplier : **ITW Global Brands**
6925 Portwest Dr., Suite 100
Houston, TX. 77024-8042
USA

MSDS Request : 1-855-888-1988

Emergency Telephone Number
Spill Information : (CHEMTREC) 1-800-424-9300, Local: 1-703-527-3887
Health Information : (RMPDC) 1-877-504-9352

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Identity	CAS No.	Concentration
Methanol	67-56-1	60.00 - 100.00 %
Carbon dioxide	124-38-9	1.00 - 5.00 %

Aerosol spray consisting of solvent, additives and carbon dioxide propellant.

3. HAZARDS IDENTIFICATION

Emergency Overview

Appearance and Odour : Hazy. Colourless. Aerosol. Liquid. Alcohol-like.

Health Hazards : Toxic if swallowed. Toxic by inhalation. Toxic in contact with skin. Poison.

Safety Hazards : Contents under pressure and can explode when exposed to heat or open flame. Extremely flammable.

Environmental Hazards : Not classified as dangerous under EC criteria.

Health Hazards

Inhalation : Danger of very serious irreversible effects. Toxic by inhalation.

Skin Contact : Danger of very serious irreversible effects. Toxic in contact with skin.

Eye Contact : Moderately irritating to eyes.

Ingestion : Danger of very serious irreversible effects.Toxic if swallowed.

Other Information : Blood.
Central nervous system (CNS).
Visual system.

Signs and Symptoms : Eye irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blurred vision. Breathing of high vapour concentrations may cause central nervous system (CNS) depression resulting in dizziness, light-headedness,

headache, nausea and loss of coordination. Continued inhalation may result in unconsciousness and death. Defatting dermatitis signs and symptoms may include a burning sensation and/or a dried/cracked appearance. Acute methanol toxicity may progress as follows: drowsiness or fatigue, and mild irritation of the eyes and mucous membranes; this may be followed (in about 18 to 24 hours and in some cases up to 72 hours) by more severe central nervous system (CNS) effects and visual disturbances including diminished eyesight or blindness, metabolic acidosis (metabolism to formic acid) and deep respirations.

Aggravated Medical Condition : Eyes. Visual system. Central nervous system (CNS). Pre-existing medical conditions of the following organ(s) or organ system(s) may be aggravated by exposure to this material:

Environmental Hazards : No specific hazards under normal use conditions.

Additional Information : Under normal conditions of use or in a foreseeable emergency, this product meets the definition of a hazardous chemical when evaluated according to the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

4. FIRST AID MEASURES

General Information : Keep victim calm. Obtain medical treatment immediately. DO NOT DELAY.

Inhalation : Remove to fresh air. If rapid recovery does not occur, transport to nearest medical facility for additional treatment. Inhalation of vapours require immediate medical attention.

Skin Contact : If persistent irritation occurs, obtain medical attention. Remove contaminated clothing. Immediately flush skin with large amounts of water for at least 15 minutes, and follow by washing with soap and water if available. If redness, swelling, pain and/or blisters occur, transport to the nearest medical facility for additional treatment.

Eye Contact : If persistent irritation occurs, obtain medical attention. Immediately flush eyes with large amounts of water for at least 15 minutes while holding eyelids open. Transport to the nearest medical facility for additional treatment.

Ingestion : DO NOT DELAY. If swallowed, do not induce vomiting: transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

Advice to Physician : Consult a Poison Control Centre for guidance. IMMEDIATE TREATMENT IS EXTREMELY IMPORTANT!

5. FIRE FIGHTING MEASURES

Clear fire area of all non-emergency personnel.

Flash point : 12.22 °C / 54.00 °F (Tag Closed Cup (ASTM D56))

Upper / lower Flammability or Explosion limits : Data not available

Specific Hazards	:	Contents are under pressure and can explode when exposed to heat or flames.
Suitable Extinguishing Media	:	Aerosol containers may be cooled by a water fog.

6. ACCIDENTAL RELEASE MEASURES

Ventilate contaminated area thoroughly.

Protective measures	:	Remove all possible sources of ignition in the surrounding area. No specific measures.
Clean Up Methods	:	Not applicable.
Additional Advice	:	Observe the relevant local and international regulations.

7. HANDLING AND STORAGE

Handling	:	Do not puncture or incinerate. Contents under pressure and can explode when exposed to heat or open flame.
Storage	:	Must be stored in a well-ventilated area, away from sunlight, ignition sources and other sources of heat.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

Material	Source	Type	ppm	mg/m3	Notation
Methanol	ACGIH	TWA	200 ppm		
Methanol	ACGIH	STEL	250 ppm		
Methanol	ACGIH	SKIN_DES			Can be absorbed through the skin.
Methanol	OSHA Z1	PEL	200 ppm	260 mg/m3	
Methanol	OSHA Z1A	TWA	200 ppm	260 mg/m3	
Methanol	OSHA Z1A	STEL	250 ppm	325 mg/m3	
Methanol	OSHA Z1A	SKIN_FINAL			Can be absorbed through the skin.
Carbon dioxide	ACGIH	TWA	5,000 ppm		
Carbon dioxide	ACGIH	STEL	30,000 ppm		
Carbon dioxide	OSHA Z1	PEL	5,000 ppm	9,000 mg/m3	
Carbon dioxide	OSHA Z1A	TWA	10,000 ppm	18,000 mg/m3	
Carbon dioxide	OSHA Z1A	STEL	30,000 ppm	54,000 mg/m3	

Additional Information	:	Adequate ventilation to control airborne concentrations below the exposure guidelines/limits. Shell has adopted as Interim Standards the OSHA Z1A values

that were established in 1989 and later rescinded.

Biological Exposure Index (BEI) - See reference for full details
Data not available

Exposure Controls	:	Adequate ventilation to control airborne concentrations below the exposure guidelines/limits.
Personal Protective Equipment	:	Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.
Respiratory Protection	:	Check with respiratory protective equipment suppliers.
Hand Protection	:	PVC, neoprene or nitrile rubber gloves.
Eye Protection	:	Chemical splash goggles (chemical monogoggles).
Protective Clothing	:	If material is handled such that it could be splashed into eyes, protective eyewear is recommended. For prolonged or repeated exposures, use impervious clothing over parts of the body subject to exposure.
Environmental Exposure Controls	:	Use only in well-ventilated areas.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	Hazy. Colourless. Aerosol. Liquid.
Odour	:	Alcohol-like.
pH	:	Not applicable.
Initial Boiling Point and Boiling Range	:	63.9 - 187.2 °C / 147.0 - 369.0 °F
Freezing Point	:	Data not available
Melting / freezing point		< 40 °C / 104 °F
Flash point	:	12.22 °C / 54.00 °F (Tag Closed Cup (ASTM D56))
Upper / lower Flammability or Explosion limits	:	Data not available
Vapour pressure	:	Data not available
Specific gravity	:	0.844
Density	:	0.842 g/cm3
Water solubility	:	Soluble.
n-octanol/water partition coefficient (log Pow)	:	Data not available
Vapour density (air=1)	:	Data not available
Volatility	:	90 % vol
Volatile organic carbon content		74 % vol
Evaporation rate (nBuAc=1)	:	Data not available

10. STABILITY AND REACTIVITY

Stability	:	Stable under normal conditions of use.
Conditions to Avoid	:	Open flame.
Materials to Avoid	:	Not applicable.
Hazardous Decomposition Products	:	None expected under normal use conditions.
Hazardous Polymerisation	:	No

Sensitivity to Mechanical Impact	:	No
Sensitivity to Static Discharge	:	Data not available

11. TOXICOLOGICAL INFORMATION

Basis for Assessment	:	Information given is based on data from components.
Acute Oral Toxicity	:	Classified as toxic. LD50 >50 - 500 mg/kg , Rat Note: There is a marked difference in acute oral toxicity between animals and man, man being more susceptible than animals. The estimated fatal dose for man is 100 millilitres.
Acute Dermal Toxicity	:	Classified as toxic. LD50 >2000 mg/kg , Rabbit
Acute Inhalation Toxicity	:	Classified as toxic. LC50 >20 mg/l Rat High concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea; continued inhalation may result in unconsciousness and/or death.
Skin Irritation	:	May cause moderate skin irritation (but insufficient to classify).
Eye Irritation	:	Expected to be moderately irritating to eyes.
Respiratory Irritation	:	Inhalation of vapours or mists may cause irritation to the respiratory system.
Sensitisation	:	Not a skin sensitiser.
Repeated Dose Toxicity	:	Visual system: may cause marked impairment of vision or blindness.
Mutagenicity	:	No evidence of mutagenic activity.
Carcinogenicity	:	Not a carcinogen.
Reproductive and Developmental Toxicity	:	Causes adverse effects on the foetus based on animal studies. Does not impair fertility.

12. ECOLOGICAL INFORMATION

Ecotoxicological data have not been determined specifically for this product.

Acute Toxicity	:	Data not available
Mobility	:	Disperses in water.
Persistence/degradability	:	Data not available
Bioaccumulation	:	Data not available
Other Adverse Effects	:	Not expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential.

13. DISPOSAL CONSIDERATIONS

Material Disposal	:	Do not dispose into the environment, in drains or in water courses.
Local Legislation	:	Disposal should be in accordance with applicable regional, national, and local laws and regulations.

14. TRANSPORT INFORMATION

US Department of Transportation Classification (49CFR)

Class / Division	Consumer Commodity, ORM-D

IMDG

Identification number	UN 1950
Proper shipping name	AEROSOLS
Class / Division	2.1
Marine pollutant:	No

IATA (Country variations may apply)

Identification number	UN 1950
Proper shipping name	Aerosols, flammable
Class / Division	2.1

15. REGULATORY INFORMATION

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

Federal Regulatory Status

Notification Status

EINECS	All components listed.
TSCA	All components listed.
DSL	All components listed.

Comprehensive Environmental Release, Compensation & Liability Act (CERCLA)

Rain-X De-Icer Aerosol ()	Reportable quantity: 6757 lbs
Methanol (67-56-1)	Reportable quantity: 5000 lbs

SARA Hazard Categories (311/312)
Immediate (Acute) Health Hazard. Delayed (Chronic) Health Hazard. Fire Hazard.

SARA Toxic Release Inventory (TRI) (313)

Methanol (67-56-1)	74.00%

State Regulatory Status

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)

This material does not contain any chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

New Jersey Right-To-Know Chemical List

Methanol (67-56-1)	Listed.
Carbon dioxide (124-38-9)	Listed.

Pennsylvania Right-To-Know Chemical List

Methanol (67-56-1)	Environmental hazard. Listed.
Propylene glycol (57-55-6)	Listed.
Carbon dioxide (124-38-9)	Listed.

16. OTHER INFORMATION

MSDS Version Number : 2.0

MSDS Effective Date : 10/08/2010

MSDS Revisions : A vertical bar (|) in the left margin indicates an amendment from the previous version.

MSDS Regulation : The content and format of this MSDS is in accordance with the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

MSDS Distribution : The information in this document should be made available to all who may handle the product.

Disclaimer : The information contained herein is based on our current knowledge of the underlying data and is intended to describe the product for the purpose of health, safety and environmental requirements only. No warranty or guarantee is expressed or implied regarding the accuracy of these data or the results to be obtained from the use of the product.