



Safety Data Sheet

Section 1: Identification

Product Identifier

Mixture

Product Name

Trade Name: Red Hot De-Icer 11oz. Aerosol

PN (Part Number): 234633

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

-De-Icer

-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 Aerosol, Category 2

Compressed gas

Acute toxicity, Oral Category 3

Acute toxicity, Dermal Category 3

Mutagen, Category 1B

Carcinogen, Category 1A

Specific Target Organ Toxicity (STOT) – Single Exposure Category 1

GHS label elements

Hazard pictograms



Signal word-DANGER**Hazard statements**

Flammable aerosol

Contains gas under pressure; may explode if heated

Toxic if swallowed or in contact with skin

May cause genetic defects

May cause cancer

Causes damage to organs

Precautionary statements**Prevention**

Obtain special instructions

Do not handle until all safety precautions have been read and understood

Keep away from heat, sparks, open flames, hot surfaces. –No smoking

Do not spray on an open flame or other ignition source

Pressurized container: Do not pierce or burn, even after use

Do not breathe dust, fumes, gas, mist, vapor spray

Wash affected areas thoroughly after handling

Do not eat, drink or smoke when using this product

Wear protective gloves/protective clothing/eye protection/face protection

Take off contaminated clothing and wash before use

Response

IF SWALLOWED: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Rinse mouth. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband. Call a POISON CONTROL CENTER, doctor if you feel unwell.

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, locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Disposal

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

Hazards not otherwise classified

Contains gas under pressure; may explode if heated.

Section 3: Composition/Information on Ingredients

Substance/mixture:Mixture

Chemical name: Not applicable

Other means of identification: No

CAS number/other identifiers

Ingredient name	%	CAS number
Methanol	50-70	67-56-1
Petroleum gases, liquefied, sweetened	10-30	68476-86-8
Ethylene glycol	1-5	107-21-1

Section 4: First Aid Measurements

Description of necessary first aid measures

General: If exposed or concerned: Get medical advice/attention. 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.

Eye contact: Check for and remove any contact lenses if present and easy to do. 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 or shower immediately with plenty of soap and water. Remove contaminated clothing and wash before reuse. Immediately call a POISON CENTER or doctor/physician.

Ingestion: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Injuries

May damage fertility or the unborn child. May cause genetic defects. Causes damage to organs.

Eye contact

Causes serious eye damage.

Inhalation

Shortness of breath. May cause cancer by inhalation.

Skin contact

Repeated exposure to this material can result in absorption through skin causing significant health hazard.

Toxic in contact with skin.

Ingestion

Fatal if swallowed. Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

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

Notes to physician

No additional information available.

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, sand, fog or foam.

Unsuitable extinguishing media

Do not use water jet.

Specific hazards arising from the chemical

Highly flammable liquid and vapor. Extremely flammable aerosol. May form flammable/explosive vapor-air mixture. Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

Hazardous thermal decomposition products/Products of combustion

No information available.

Special protective actions for fire fighters

Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment. DO NOT fight fire when fire reaches explosives. Evacuate area.

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.

Other information

Aerosol level 2

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

No naked lights. No smoking. Isolate from fire, if possible, without unnecessary risk. Remove ignition sources. Use special care to avoid static electric charges. 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. Notify authorities if liquid enters sewers or public waters. 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:

Handle empty containers with care because residual vapors are flammable. Hazardous waste due to potential risk of explosion. Pressurized container: Do not pierce or burn, even after use.

No naked lights. Keep away from heat sources, sparks, direct sunlight, open flames, hot surfaces.

– No smoking.

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. Do not expose to temperatures exceeding 50°C/122°F.

Keep container tightly closed. Keep only in the original container. Store in a well-ventilated area. Keep cool. Keep in an area suitable for flammable liquids.

Incompatible with strong bases and strong acids.

Section 8: Exposure Controls/Personal Protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits																		
Ethylene glycol	<u>ACGIH Ceiling</u> 100 mg/m ³																		
Petroleum gases, Liquefied, sweetened	<table> <tr> <th data-bbox="651 594 824 623"><u>ACGIH</u></th><th data-bbox="841 594 1015 623"><u>OSHA</u></th></tr> <tr> <td data-bbox="651 632 824 661"><u>(TWA)</u></td><td data-bbox="841 632 1015 661"><u>(STEL)</u></td></tr> <tr> <td data-bbox="651 669 824 701">1000 ppm</td><td data-bbox="841 669 1015 701">N/A</td></tr> </table> <table> <tr> <th data-bbox="1031 594 1205 623"><u>OSHA</u></th><th data-bbox="1221 594 1437 623"><u>(STEL)</u></th></tr> <tr> <td data-bbox="1031 632 1205 661"><u>(TWA)</u></td><td data-bbox="1221 632 1437 661"><u>(STEL)</u></td></tr> <tr> <td data-bbox="1031 669 1205 701">1000 ppm; 1800 mg/m³</td><td data-bbox="1221 669 1437 701">N/A</td></tr> </table>	<u>ACGIH</u>	<u>OSHA</u>	<u>(TWA)</u>	<u>(STEL)</u>	1000 ppm	N/A	<u>OSHA</u>	<u>(STEL)</u>	<u>(TWA)</u>	<u>(STEL)</u>	1000 ppm; 1800 mg/m ³	N/A						
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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

Do not eat, drink or smoke during use.

Eye/face protection: Use chemical safety goggles or glasses.

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. Avoid all unnecessary exposure.

Respiratory protection: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.

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: Gas

Odor: Characteristic

Odor threshold: Not determined

pH: No data available

Specific Gravity: 0.834

Melting point: -98°C

Boiling point: 65°C

Flash point: -96°C

Evaporation rate (BuAc=1): No data available

Flammability (solid, gas): No data available

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

Vapor pressure: No data available

Vapor density (Air=1): No data available

Solubility: Soluble in water and alcohols

Partition coefficient: n-octanol/water: Not Established

Auto-ignition temperature: 455°C

Decomposition temperature: No data available

Viscosity: No data available

VOC content: 84.93%

Section 10: Stability and Reactivity

Reactivity

No additional information available.

Chemical stability

Highly flammable liquid and vapor. May form flammable/explosive vapor-air mixture. Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Extreme risk of explosion by shock, friction, fire or other sources of ignition.

Possibility of hazardous reactions

Not established.

Conditions to avoid

Direct sunlight. Extremely low temperatures or temperatures above the flash point. Avoid excessive heat, open flame or other sources of ignition.

Incompatible materials

Strong acids

Strong bases

Hazardous decomposition products

May release flammable gases, toxic fumes, carbon monoxide and carbon dioxide.

Section 11: Toxicological Information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Test	Results
Methanol	Acute toxicity, oral (male rat)	LD50 > 2528 mg/kg
	Acute toxicity, dermal	LD50 = 17100 mg/kg
	Acute toxicity, inhalation (rat)	LC50 = 128 mg/L/4 hour air
Ethylene glycol	Acute toxicity, oral (male rat)	LD50 = 7712 mg/kg
	Acute toxicity, dermal	LD50 = 3500 mg/kg
	Acute toxicity, inhalation (rat)	LC50 = 2.5 mg/L/6 hour air

Summary Comments:

Sensitization

Product/ingredient name	Test	Results	Basis
Red Hot De-Icer Aerosol			No evidence of sensitization effect

Summary Comments:

Carcinogenicity

Product/ingredient name	Test	Results	Basis
Red Hot De-Icer Aerosol			May cause cancer

Summary Comments:

Specific target organ toxicity (single exposure)

Product/ingredient name	Test	Results	Basis
Red Hot De-Icer Aerosol		Causes damage to organs	

Summary Comments:

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Test	Results	Basis
Red Hot De-Icer Aerosol		Not classified based on available data, the classification criteria are not met.	

Summary Comments:

Aspiration hazard

Product/ingredient name	Test	Results	Basis
Red Hot De-Icer Aerosol		Not classified based on available data, the classification criteria are not met.	

Summary Comments:

Information on the likely routes of exposure

Fatal if swallowed. Based on available data, the classification data are not met. Toxic if swallowed. Toxic in contact with skin.

Potential acute health effects

Eye contact: Causes serious eye damage.

Inhalation: Shortness of breath. May cause cancer by inhalation.

Skin contact: Repeated exposure to this material can result in absorption through skin causing significant health hazard. Toxic in contact with skin.

Ingestion: Fatal if swallowed. Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Eye irritation.

Inhalation: Shortness of breath.

Skin contact: Skin irritation.

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

Potential chronic health effects (Methanol)

Carcinogenicity: May cause cancer.

Mutagenicity: May cause genetic defects. Based on available data, the classification criteria are not met.

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: (Ethylene glycol)

LC50 - Oncorhynchus mykiss (rainbow trout) – 40,761 mg/l - 96 h

LC50 – Pimephales promelas – 53,000 mg/l - 96 h

Acute Fish toxicity: (Methanol)

LC50 - Oncorhynchus mykiss (rainbow trout) – 10,800 mg/l - 96 h

LC50 – Lepomis macrochirus – 15,400 mg/l - 96 h

Acute toxicity for daphnia: (Ethylene glycol)

EC50 - Daphnia magna (Water flea) – 10,000 mg/l - 24 h

Acute toxicity for daphnia: (Methanol)

EC50 - Daphnia magna (Water flea) – 10,000 mg/l - 48 h

Acute toxicity for algae: (Ethylene glycol)

EC50 - Scenedesmus quadricauda (fresh water algae) – 10,000 mg/l - 96 h

Acute toxicity for algae: (Methanol)

EC50 - Scenedesmus quadricauda (fresh water algae) – 8,000 mg/l - 168 h

Acute bacterial toxicity: (Methanol)

Pseudomonas putida – 6,600 mg/L – 16 h

Ecotoxicology Assessment: (Aerosol De-Icer)

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.

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

Partition coefficient n-octanol/water (log P_{ow}): (Methanol) = -0.77 (Experimental value)

Biochemical Oxygen Demand (BOD) (Methanol) = 0.6 – 1.2 g O₂/g substance

Theoretical Oxygen Demand (ThOD) (Methanol) = 1.5 g O₂/g substance

Partition coefficient n-octanol/water (log P_{ow}): (Ethylene glycol) = -1.34 (Experimental value)

Biochemical Oxygen Demand (BOD) (Ethylene glycol) = Not established

Theoretical Oxygen Demand (ThOD) (Ethylene glycol) = Not established

Bioaccumulative potential

Bioaccumulation: (Ethylene glycol)

Leuciscus idus (fish) – 10 (72 h)

Algae – 190 (24 h)

Bioaccumulation factor (BCF) : <500 (Low potential for bioaccumulation)

Bioaccumulation: (Methanol)

Leuciscus idus (fish) – <10 (72 h)

Bioaccumulation factor (BCF) : <500 (Low potential for bioaccumulation)

Mobility in soil:

Ethylene glycol = 0.048 N/m (20°C)

Methanol = 0.023 N/m (20°C)

Other adverse effects:

Avoid release in the environment.

Section 13: Disposal Considerations

Disposal methods

Dispose in accordance with applicable international, national and local laws, ordinances and statutes. Container under pressure. Do not drill or burn even after use. Dispose of contents/container to appropriate waste disposal facility, in accordance with local, regional, national, international regulations.

Handle empty containers with care because residual vapors are flammable. Flammable vapors may accumulate in the container.

Hazardous waste due to toxicity. Avoid release to the environment.

Section 14: Transport Information

In accordance with ADR/RID/IMDG/IATA/ADN

UN Number: UN1950

UN Proper Shipping Name: Aerosols

Transport hazard Class(es): 2.1

Packing Group: Limited Quantity

US DOT (ground) Land Transport ADR/RID and GGVS/GGVE (Cross Border / Domestic)

UN1950, Aerosols, 2.1, Limited Quantity

IMO Maritime Transport IMDG/GGVSea (water)

UN1950, Aerosols, 2.1, Limited Quantity

Air Transport ICAO-TI and IATA-DGR (air)

UN1950, Aerosols, 2.1, Limited Quantity

Hazard Labels (DOT): 2.2 – Non-Flamable gas

: 6.1 – Poison Inhalation Hazard

DOT Packaging Exceptions (49 CFR 173.xxx): 306

DOT Packaging Non Bulk (49 CFR 173.xxx): None

DOT Packaging Bulk (49 CFR 173.xxx): None

Overland transport: No supplementary information available.

Transport by sea

DOT Vessel Stowage Location: A – The material may be stowed “on deck” or “under deck” on a cargo vessel and on a passenger vessel.

DOT Vessel Stowage Other: 48 – Stow “away from” sources of heat, 87 – Stow “separated from” Class 1 (explosives) except Division 14, 126 – Segregation same as for Class 9, miscellaneous hazardous materials.

Air transport

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27): Forbidden

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75): Forbidden

Section 15: Regulatory Information

Chemical Inventory Status-Part 1 (Regulatory information given based on Methanol; most hazardous and most concentrated component of formula)

Ingredient (CAS#)	TSCA	EC	Japan	Australia
Red Hot De-Icer Aerosol, Methanol (67-56-1)	Yes	Yes	Yes	Yes

Chemical Inventory Status-Part 2 (Regulatory information given based on Methanol; most hazardous and most concentrated component of formula)

Ingredient (CAS#)	Korea	Canada	Canada	Philippines
		DSL	NDSL	
Red Hot De-Icer Aerosol, Methanol (67-56-1)	Yes	Yes	No	Yes

Federal, State & International Regulations-Part 1 (Regulatory information given based on Methanol; most hazardous and most concentrated component of formula)

Ingredient (CAS#)	SARA 302		SARA 313	
	RQ	TPQ	List Chemical	Category
Red Hot De-Icer Aerosol, Methanol (67-56-1)	No	No	Yes	No

Federal, State & International Regulations-Part 2 (Regulatory information given based on Methanol; most hazardous and most concentrated component of formula)

Ingredient (CAS#)	RCRA		TSCA
	CERCLA	261.33	8(d)
Red Hot De-Icer Aerosol, 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: Yes, Reactivity: No

Mixture/Liquid

Australian Hazchem Code: 2PE

Poison Schedule: No information found

Section 16: Other Information

History

Date of issue: 12/26/14

Version: 1a

Revised Sections(s): New

Prepared by: Andrew Gioino, SPLASH PRODUCTS

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

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.