



Material Safety Data Sheet

Date Prepared/Revised: 12/4/2013 Version no.: 02 Supersedes: (11/30/2010)

1.) Identification of the Mixture and of the Company

Product identifier: **Crown Sprâ Tool (Replacement Power Pak) - Aerosol**

Product name:

Sprâ Tool (Replacement Power Pak 8211)

Relevant identified uses of the substance: Use to coat metal, wood, fiberglass, plastics and rubber. The Sprâ-Tool@Power -Pak is a hydrocarbon blended propellant that optimizes atomization and spray pressure. Clean and/or lubricate de-energized power equipment, hinges, rollers, tools, gears, pulleys and more!

Uses advised against: Poorly ventilated areas

CAS No.:	Not Applicable (mixture)
Manufacturer/Supplier:	Aervoe Industries Incorporated
Street address/P.O. Box:	1100 Mark Circle
Country ID/Postcode/Place:	Gardnerville, Nevada 89410
Telephone number:	001 (0) 1-775-782-0100
e-mail:	mailbox@aervoe.com
National contact:	Aervoe industries Incorporated
For Product Information:	001 (0) 1-800-227-0196
Emergency telephone number:	001 (0) 1-800-424-9300 (CHEMTREC – 24 hrs) English Language Service

2. Hazards identification

This product does not meet the criteria for classification according to Directive 1999/45/EC

Potential health effects: **See Section 11**

Primary routes of entry: **Inhalation, Skin, Eyes, Ingestion**

3. Composition / Information on Ingredients

Material	CAS Number	EINECS Number	Weight Percent	Risk and Safety Phrases	Notes
Hydrocarbon Propellant	68476-86-8	270-705-8	15-40%	R12, R45, R46, S45, S53	

For full text of R&S- phrases: see section 16.

R Code Summation: R12, R45, R46

S Code Summation: S45, S53

4.) First Aid Measures

General Advice:

If symptoms persist, always call a doctor.

Inhalation First Aid:

Remove victim to fresh air and provide oxygen if breathing is difficult. If not breathing, give artificial respiration, preferably



Material Safety Data Sheet

Date Prepared/Revised: 12/4/2013 Version no.: 02 Supersedes: (11/30/2010)

Skin Contact First Aid: mouth to mouth. Get medical attention immediately. Wash with soap and water. Remove contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse.

Eye Contact First Aid: If contact with eyes, immediately flush eyes with plenty of water for at least 15 minutes, while holding eyelids open. Get medical attention immediately.

Ingestion First Aid: If swallowed, wash out mouth with water provided the person is conscious. Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

5. Fire Fighting Measures

Flammable Properties: Aerosol
Flash Point: <0° C (-18° F)
Auto Ignition Temperature: Not Available
Flammable Limits in Air:
% by Volume: LEL: 1.8% UEL: 9.5%
Suitable extinguishing media: Carbon dioxide, dry chemical, water spray.
Unsuitable extinguishing media: None known
Special hazards arising from the substance or mixture: None known
Hazardous combustion products: Carbon dioxide, Carbon monoxide
Fire & Explosion Hazards: Closed Containers may rupture due to the buildup of pressure from extreme temperatures.

Advice for fire-fighters: Use water spray to cool containers exposed to heat or fire to prevent pressure build up. 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.

6. Accidental Release Measures

PERSONAL PRECAUTIONARY MEASURES:

- 1) Follow personal protective equipment recommendations found in section 8.
- 2) Maintain adequate ventilation.

SPILL CLEAN-UP PROCEDURES:

- 1.) Evacuate unprotected personnel from the area.
- 2.) Remove sources of ignition if safe to do so.
- 3.) Pickup spilled materials using non-sparking tools and place in an appropriate container for disposal.
- 4.) Contain spill to prevent material from entering sewage or ground water systems.
- 5.) Always dispose of waste materials in accordance with all EU, National and Local Regulations.

7. Handling and Storage



Material Safety Data Sheet

Date Prepared/Revised: 12/4/2013 Version no.: 02 Supersedes: (11/30/2010)

Flammable Aerosol, use in a well ventilated area.
Do not use near sources of ignition.
Store out of direct sunlight.
Storage Temperature: 32° to 120°F (0° to 49°C)
Do not to eat, drink and smoke while working with this material.
Wash hands after use.

8. Exposure Controls / Personal Protection

Appropriate engineering controls:

Ensure adequate ventilation. A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits.

Keep away from sources of ignition.

Take precautionary measures against static discharge.

Personal Protection:

Eye & face protection devices such as safety glasses, safety goggles or face shield are recommended.

Skin protection

Wear the appropriate protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Respiratory protection:

Use only in an adequately ventilated area. For unknown vapor concentrations use a positive-pressure, pressure-demand, self-contained breathing apparatus (SCBA).

Hazardous Ingredient	CAS Number	TWA	STEL
Hydrocarbon Propellant	68476-86-8	N/AV	N/AV

9. Information on Basic Physical and Chemical Properties

Appearance: Clear, colorless	Odor: Odorless
Odor Threshold: N/AV	pH: Not Applicable (solvent Base)
Melting Point: N/AV	Freezing Point: N/AV
Initial Boiling Point: N/AV	Boiling Point Range: N/AV
Flash Point: <0° F (-18° C)	Evaporation Rate: Slower than ether
Flammability Solid/Gas: Flammable gas	Upper LEL: 1.8% Lower LEL: 9.5%
Vapor Pressure: N/AV	Vapor Density: Heavier Than Air
Relative Density: N/AV	Solubility: Negligible
Partition Coefficient: n-octanol/ water: N/AV	Auto-ignition Temperature: N/AV
Decomposition Temperature: N/AV	Viscosity: N/AV
Explosive Properties: N/AV	Oxidizing Properties: N/AV

10. Stability & Reactivity



Material Safety Data Sheet

Date Prepared/Revised: 12/4/2013 Version no.: 02 Supersedes: (11/30/2010)

Possibility of hazardous reactions: Hazardous polymerization will not occur under normal conditions

Conditions to avoid: Heat and ignition sources

Incompatible materials: Strong Oxidizing Agents

Hazardous decomposition products: Will not occur

11. Toxicological Information

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. Repeated overexposure can also damage kidneys, lungs, liver, heart and blood

12. Ecological Information

Toxicity: **No Data Available**

Persistence and degradability: **No Data Available**

Bioaccumulative potential: **No Data Available**

Mobility in soil: **No Data Available**

Results of PBT and vPvB assessment: **No Data Available**

Other adverse effects: **No Data Available**

13. Disposal Considerations

Waste Disposal: Dispose of material in accordance with EU, national and local requirements. For proper disposal of used material, an assessment must be completed to determine the proper and permissible waste management options permitted under applicable rules, regulations and/or laws governing your location.

Product / Packaging disposal: Dispose of packaging in accordance with federal, state and local requirements, regulations and/or laws governing your location.

14. Transportation Information

US DOT

UN Number	Proper Shipping Name	Hazard Class	Packing Group	Marine Pollutant	Special Provisions
UN1965	Hydrocarbon Gas Mixture, Liquified, n.o.s., (Hydrocarbon Propellant)	2.1	Not Applicable	Not Applicable	Not Applicable

IMDG

UN Number	Proper Shipping Name	Hazard Class	Packing Group	Marine Pollutant	Special Provisions
UN1965	Hydrocarbon Gas Mixture, Liquified, n.o.s., (Hydrocarbon Propellant)	2.1	Not Applicable	Not Applicable	Not Applicable

IATA:

UN	Proper Shipping Name	Hazard	Packing	Marine	Special
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Material Safety Data Sheet

Date Prepared/Revised: 12/4/2013 Version no.: 02 Supersedes: (11/30/2010)

Number		Class	Group	Pollutant	Provisions
UN1965	Hydrocarbon Gas Mixture, Liquified, n.o.s., (Hydrocarbon Propellant)	2.1	Not Applicable	Not Applicable	Not Applicable

15. Regulatory Information

Workplace classification:

This product is considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200). The Occupational Safety and Health Administration's interpretation of the product's hazard to workers.

SARA Title 3:

Section 311/312 Categorizations (40 CFR 372): This product is a hazardous chemical under 29 CFR 1910.1200, and is categorized as an immediate and delayed health, and flammability physical hazard. Superfund Amendment and Reauthorization Act (SARA) category. SARA requires reporting any spill of any hazardous substance.

TSCA status: All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

PROP 65 (CA): Warning: This product may contain chemicals know to the state of California to cause cancer, birth defects or other reproductive harm.

16. Other Information

List of relevant Risk and Safety phrases:

R Phrases:

- R12: Extremely flammable
- R45: May cause cancer
- R46: May cause heritable genetic damage

S Phrases:

- S45: In case of accident or if you feel unwell seek medical advice immediately (show the label where possible)
- S53: Avoid exposure - obtain special instructions before use

National Fire Protection Association (NFPA) ratings

Health = 2 Flammability = 4 Reactivity = 1

This SDS has been completed in accordance with Regulation (EC) No. 1907/2006

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To the best of our knowledge, the information contained herein is believed to be accurate. However, the above data does not imply any guarantee or warranty of any kind, expressed or implied. The final determination of the suitability of any material is the sole responsibility of the user. All materials made present un-known hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee these are the only hazards existing.



Material Safety Data Sheet (WHMIS)

SECTION I: PRODUCT INFORMATION

MANUFACTURER/SUPPLIER:

Goodrich De-icing and Specialty Systems
1555 Corporate Woods Parkway
Uniontown, Ohio (USA) 44685

PRODUCT IDENTIFIER:

0165JC51

PRODUCT USE:

Aerospace Coating

TELEPHONE:

Emergency: 1-800-424-9300
Information: (330)374-4011

PRODUCT IDENTIFICATION NO.:

P/N's 74-451-156 (Used in P/N 74-451-S-2 Silver De-icer Repair Kit) & 74-451-167

REV. DATE: 6-21-02

SECTION II: HAZARDOUS INGREDIENTS

MATERIAL OR COMPONENT ⁴	CAS NUMBER	WEIGHT (%)	OSHA PEL	ACGIH TLV	LD ₅₀ (RAT)	LC ₅₀ (RAT)
Methyl Ethyl Ketone ¹	78-93-3	49	200 ppm	200 ppm	2.9 g/kg oral	>5000 ppm (v) 8 hours Inhalation
Cyclohexanone ²	108-94-1	45	50 ppm	25 ppm	1535 mg/kg oral	8000 ppm/ hr.
Tetrahydrofuran	109-99-9	5	200 ppm	200 ppm	2816 mg/kg oral	IHL 62 mg/kg
Aluminum ¹	7429-90-5	2	15 ppm	10 ppm	N/A	N/A
Toluene ^{1,2}	108-88-3	1	200 ppm	50 ppm	636 mg/kg oral	49 g/m ³ /4H Inhalation
Glycol Ether Acetate	108-65-6	1	N/A	N/A	8532 mg/kg oral	N/A
Antimony Oxide ³	1309-64-4	<0.5	0.5 mg (Sb)/m ³	0.5 mg (Sb)/m ³	> 20g/kg oral	> 100 mg/l fish 96 hr.
Propylene Oxide ^{1,2,3}	75-56-9	<0.1	100 ppm	20 ppm	380 mg/kg oral	4000 ppm/4H inhalation
Diisodecyl Phthalate	68515-49-1	<0.5	N/A	N/A	N/A	N/A
Urethane Polymer and Fillers – non-hazardous	Mixture	<4	N/A	N/A	N/A	N/A

1. Contains chemicals listed in SARA Title III, Section 313
2. Contains chemicals identified as a skin hazard
3. Identified as possible carcinogens.
4. All components are contained in TSCA inventory

SECTION III: PHYSICAL DATA

BOILING POINT (°F)	151-410	SPECIFIC GRAVITY	.88
VAPOR PRESSURE (mm Hg)	N/A	% VOLATILE BY WEIGHT	98
VAPOR DENSITY (AIR = 1)	>1	EVAPORATION RATE (BUTYL ACETATE = 1)	N/A
SOLUBILITY IN WATER (20°C)	APPRECIABLE	FREEZING POINT (°F)	N/A
ODOR THRESHOLD	1-5 ppm	COEFFICIENT OF WATER/OIL DISTRIBUTION	N/A
PHYSICAL STATE (pH = N/A)	LIQUID	ODOR AND APPEARANCE	Silver thin liquid with sharp odor

SECTION IV: FIRE AND EXPLOSION DATA

FLASH POINT (METHOD): Mixture 6°F (TCC)	FLAMMABLE LIMITS IN AIR % BY VOLUME LEL: 1.1% UEL: 12.7%
EXTINGUISHING MEDIA:	Flammable liquid (flash point < 100°F) Use dry chemical, carbon dioxide or foam. Carbon dioxide may be ineffective on larger fires due to a lack of cooling capacity which may result in reignition. Water may be ineffective if used as stream, if used use water fog.
SPECIAL FIRE FIGHTING PROCEDURES:	<p>Wear self contained breathing apparatus (SCBA) equipped with a full facepiece and operated in a pressure demand mode or other positive pressure mode and protective clothing. Personnel not having suitable respiratory protection must leave the area to prevent significant exposure to toxic gases from combustion, burning, or decomposition. In an enclosed or poorly ventilated areas, wear SCBA during cleanup immediately after a fire as well as during the attack phase of fire fighting operations.</p> <p>Use water/water spray to keep fire exposed containers cool. If spill or leak has not ignited, use water spray to disperse the vapors and to protect personnel attempting to stop a leak. Solid or straight hose stream will cause fire to spread if directed onto a burning spill or into an open container of burning liquid.</p> <p>Product will burn if an ignition source is present. Irritating or toxic substances will be emitted upon combustion, burning or decomposition.</p> <p>Static electricity may accumulate. Ground fixed equipment. Bond and ground containers during transfer of product.</p> <p>Vapors are heavier than air and may travel along the ground or may be moved by ventilation and ignited by flame, sparks, heaters, or other ignition sources at distant locations (flashback potential).</p> <p>Empty container may still contain residual vapors or liquid which may ignite or explode. Do not cut, puncture, or weld on or near the container. Keep container away from heat, sparks and open flame of any sort.</p> <p>Hot vapor or mists from combustible liquids may be susceptible to spontaneous combustion when mixed with air. Ignition temperature decreases with increasing vapor volume and vapor/air contact time and are influenced by pressure changes. Use of this product in processes involving elevated temperatures, vacuum if subject to sudden ingress of air, sudden escape of vapor or mist, etc. must be thoroughly evaluated to assure safe operation.</p>
HAZARDOUS DECOMPOSITION PRODUCTS:	Decomposition products have not been determined and will depend on decomposition conditions, but will most likely contain carbon monoxide, carbon dioxide, smoke, aliphatics, and hydrocarbons.
FLAMMABILITY: N/A	AUTO-IGNITION TEMPERATURE: N/A
EXPLOSION – SENSITIVITY TO IMPACT: N/A	EXPLOSION - SENSITIVITY TO STATIC DISCHARGE: N/A

SECTION V: REACTIVITY DATA

CHEMICAL STABILITY: STABLE	CONDITIONS TO AVOID: EXCESSIVE HEAT
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INCOMPATIBILITY: Avoid contact with strong oxidizing agents such as hydrogen peroxide, permanganates and perchlorates. Depending on the amount and specific materials involved, contact can result in intense heat, boiling, flame development, explosion or toxic gas generation. Avoid contact with caustic, strong acids, amines, alkanolamines, aldehydes, ammonia, and isocyanates.

HAZARDOUS DECOMPOSITION PRODUCTS: Decomposition products and amounts produced will depend on decomposition conditions, but will most likely contain some carbon monoxide, carbon dioxide, aliphatics and hydrocarbons.

REACTIVITY: Not Reactive	CONDITIONS TO AVOID: N/A
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SECTION VI: TOXICOLOGICAL PROPERTIES

ROUTES OF ENTRY: Skin and Eye Contact, Ingestion, Inhalation of Vapors/Mist

NO TOXICITY STUDIES HAVE BEEN CONDUCTED ON THIS MIXTURE. As with all chemicals for which test data are limited or do not exist, caution must be exercised through the prudent use of protective equipment and handling procedures to minimize exposure. AVOID EYE AND SKIN CONTACT. AVOID INHALATION. DO NOT INGEST, TASTE OR SWALLOW. USE UNDER WELL VENTILATED CONDITIONS. WEAR EYE PROTECTION AND CHEMICAL RESISTANT (IMPERVIOUS) GLOVES. WASH THOROUGHLY AFTER HANDLING. KEEP CONTAINER CLOSED WHEN NOT IN USE.

ACUTE AFFECTS (SHORT OR SINGLE EXPOSURE):

- EYE CONTACT: Liquid and/or mist will cause irritation and may cause corneal clouding.
- INGESTION: Minimal toxicity. Small amounts of the liquid aspirated in the respiratory system during ingestion, or from vomiting, may cause bronchopneumonia or pulmonary edema.
- SKIN CONTACT: May cause defatting or dermatitis on prolonged contact. May be absorbed through the skin.
- INHALATION: May cause nose and throat irritation, headache, nausea, loss of coordination, dizziness, unconsciousness and even asphyxiation.

CHRONIC AFFECTS OF OVEREXPOSURE: May cause dermatitis, liver or kidney damage. Embryo/fetotoxic effects have been observed in laboratory rats exposed to over 1000 ppm of methyl ethyl ketone for most of gestation period.

Reports have associated repeated and prolonged occupational over exposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents maybe harmful or fatal.

EXPOSURE LIMITS: TWA: N/A, STEL: N/A – See limits for Hazardous Ingredients on page 1.

IRRITANCY OF PRODUCT: May cause eye, nose and/or throat intestinal irritation.

SENSITIZING CAPABILITY OF PRODUCT: N/A

CARCINOGENICITY: Not known for mixture. See Hazardous ingredients listed on page 1.

TERATOGENICITY AND EMBRYOTOXICITY: N/A

 REPRODUCTIVE TOXICITY: N/A

 MUTAGENICITY: N/A

 SYNERGISTIC MATERIALS: N/A

SECTION VII: PREVENTIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT:	<ul style="list-style-type: none"> - GLOVES: Resistant gloves (i.e. Butyl, etc.) - RESPIRATORY: Use in a well-ventilated workplace. Wear a respirator approved NIOSH/MSHA (for organic vapors or self-contained breathing apparatus) whenever exposure to mist, fumes, or vapors cannot be control below permissible exposure levels. - EYE PROTECTION: Safety glass at minimum. - FOOTWEAR: N/A - CLOTHING: Appropriate to prevent eye and skin contact. - OTHER: Have eyewash and safety shower in area.
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ENGINEERING CONTROLS:	Local exhaust to keep vapors/mist below TWA or permissible limits. Always provide effective general and when necessary, local exhaust ventilation to avoid potentially combustible air/vapor mixtures in the process area and to draw mists, fumes and vapors away from workers to prevent routine inhalation exposure limits listed in Section II, if any.
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LEAK AND SPILL PROCEDURES:	Eliminate all ignition sources. Ventilate the area. If spill is large, be prepared to isolate the hazard area. Deny access to the spill area to persons who are not involved in the cleanup and/or who have not been properly trained in spill management of hazardous liquids. Contain spill by diking with sand, earth or other non-combustible material. Prevent flow into public sewer (fire/explosion hazard), streams or other water systems. Blanket large spills with foam to minimize fire hazard and reduce vaporization. Remove as much as possible. Soak up large spill residue and small spills with an inert absorbent or rags. Place waste into closed, labeled container and store in a safe location to await disposal. Transfer contaminated earth and/or diking/spill absorbent material to closed containers for recovery or disposal. Wash the spill area to remove final traces. Personal protective equipment and clothing must be utilized by persons performing this work
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WASTE DISPOSAL:	Dispose of product and contaminated materials in accordance with applicable Federal, State, and Local regulations.
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HANDLING PROCEDURES AND EQUIPMENT:	In addition to any precautions listed, you should consult your occupational safety and health specialist to ensure that the suggested procedures will be adequate and in compliance with applicable laws and regulations.
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- Use only in well ventilated area and avoid breathing vapors and mists.
 - Avoid skin and eye contact (especially prolonged or repeated contact).
 - Wash thoroughly after handling material. Always wash up before eating, smoking or using toilet facilities.
 - Provide an eyewash and safety shower in area.
 - Keep out of the reach of children.
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STORAGE REQUIREMENTS:	<ul style="list-style-type: none"> - Store in cool, dry, well ventilated place. - Store in tightly closed containers. - Empty containers of this material may contain residual liquid, vapors or dust. Precautions previously cited should be observed with such containers. Dispose of in accordance with all Federal, State, and Local regulations.
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SPECIAL SHIPPING INFORMATION:	DOT CLASSIFICATION:	UN-1263
	HMIS RATING:	H-3, F-3, R-1
	WHMIS CLASSIFICATION:	Not Determined

SECTION VIII: FIRST AID MEASURES

EYES:	Flush eyes with plenty of water for at least 15 minutes (holding eyelids open), longer if there are indications of residual material in eye. See a physician if irritation persists.
SKIN:	Remove contaminated clothing and shoes. Launder before reuse. Wash affected area with plenty of soap and water. See a physician if irritation develops or persists.
INHALATION:	Move to fresh air immediately. Keep at rest. If not breathing give artificial respiration, preferably mouth to mouth. If breathing is difficult, administer oxygen. Keep person warm and quiet. Call a physician at once.
INGESTION:	INDUCE VOMITING ONLY AT INSTRUCTION OF A PHYSICIAN. Keep affected individual at rest. Get prompt medical attention. If vomiting occurs, keep head below hips to help prevent aspiration.

NOTE: Never give anything by mouth to an unconscious person. Never give anything to drink to person who is convulsing or has no gag reflex.

SECTION IX: PREPARATION INFORMATION

PREPARED BY:	Terry Sluss
TITLE:	Advanced Product Chemist
TELEPHONE:	(330)374-4011
ORIGINAL DATE:	12/14/88
REV. DATE:	6/21/02

DISCLAIMER OF LIABILITY:

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