

Super-Kool

MSDS# SCM-705
May 2012

7 Total Pages

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Super Kool
Manufactured by: Diversitech
 6650 Sugarloaf Parkway, Duluth, GA 30097
Phone: 800-995-2222 (Product Information)
Phone: 800-255-3924 (CHEM-TEL, Chemical Emergencies Only)
Revised: 05/19/2012
Prepared By: Wyatt Coleman

2. HAZARDS IDENTIFICATION



Corrosive Harmful Toxic

Route of entry: Inhalation: **yes** Skin: **yes** Eyes: **yes** Ingestion: **yes**
Health Hazards (acute and chronic): This material is corrosive to skin, eyes, and internal organs.
Signs and Symptoms of Exposure:
Eye Contact: Severe irritation and possible burns.
Skin Contact: Severe irritation and possible chemical burns. Symptoms may be delayed for up to 12 hours.
Inhalation: Mists may irritate respiratory system and cause difficulty breathing.
Ingestion: Solutions and mists are corrosive and toxic. May cause gastric distress, diarrhea, and vomiting. May be fatal if swallowed.
Medical conditions generally aggravated by exposure: Contact may aggravate pre-existing medical conditions such as dermatitis or asthma.
Carcinogenicity: NTP? No. IARC? No. OSHA? No.

3. COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENT	CAS No.	EINECS No.	% or Range	Hazard Symbol	Risk Phrases
Water	7732-18-5		25-50		
Sulfamic acid	5329-14-6	226-218-8	<10	Xi	R36/38
Phosphoric acid	7664-38-2	231-633-2	<50	C	R34, 35, 22, 39/23/24/25-36/38

Super-Kool

4. FIRST-AID MEASURES

Emergency and First Aid Procedures:

Eyes: Flush with water for 15 minutes. Lift the eyelids while flushing to make certain all areas of the eye and eyelid are flushed. Get medical attention as soon as first aid has been administered.

Skin: Remove contaminated clothing. Wash the affected area with soap and water. If irritation develops or persists, get medical attention. Decontaminate clothes and shoes before reuse.

Inhalation: Evacuate to a safe area with plenty of fresh air. Allow the affected individual to rest in a well-ventilated area. Seek medical aid if breathing distress continues.

Ingestion: DO NOT induce vomiting. Drink 3-4 glasses of milk or water. Call the nearest poison control center for medical advice.

5. FIREFIGHTING MEASURES

Not considered to be a fire hazard. Can react with certain metals, such as aluminum, to generate flammable hydrogen gas.

Explosion: May cause fire and explosions when in contact with incompatible materials.

Fire Extinguishing Media: Use any means suitable for extinguishing surrounding fire. Adding water to caustic solution generates large amounts of heat.

Special Information: 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

Note: No cleanup should be attempted until cleanup personnel are equipped with personnel protective gear to prevent contact with product. (Applies to undiluted product.) Remove contaminated clothing immediately. Ventilate area of leak or spill. Keep unnecessary and unprotected people away from area of spill. Wear appropriate personal protective equipment as specified in Section 8.

Spills: Neutralize with sodium bicarbonate, soda ash, or lime. Pick up neutralized solution with a plastic pump or vacuum truck and store the neutralized solution in a leak-proof polyethylene container until product can be disposed of in a hazardous waste facility. Flush area twice with water to remove any remaining residues. Store wash solution in polyethylene containers for disposal. Do not use aluminum tools to collect absorbed material or aluminum containers to store collected wastes. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

7. HANDLING AND STORAGE

Keep containers closed when not in use. Practice good housekeeping. Wash hands after handling. Avoid smoking when using this product. Wash clothing that has become contaminated. Keep out of reach of children. Read the disposal information before disposing of leaking or empty containers. Avoid breathing mists or spray. Avoid contact with eyes. Use only with adequate ventilation. Do not use metal measuring containers for handling this product. Make sure all safety equipment is available and protective clothing is in use before handling this product. Do not store with aluminum or magnesium containers. Do not mix with acids or organic materials. Keep this and all chemicals out of the reach of children. Wash thoroughly after handling.

Super-Kool

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Airborne Exposure Limits:

- OSHA Permissible Exposure Limit (PEL): 1 mg/m³ (phosphoric acid mist in air)

Ventilation System: 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.

Personal Respirators (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 or European Standard EN 149 respirators) 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 filters) 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 with acid-gas cartridge 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.

Skin Protection: Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Eye Protection: Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities or a source of running water in the work area.

Work Hygienic Practices: Use proper industrial hygiene practices to minimize hazardous exposure. Wash hands after handling this material, and before eating, smoking or using the toilet.

9. PHYSICAL AND CHEMICAL CHARACTERISTICS

Color: Clear, slightly amber liquid

Odor: Slight astringent odor

Odor threshold: N/A

Initial boiling point and boiling range: 118-171 °C (Depending on concentration) 760 mm Hg

Melting Point: 18 to 27 °C

Flash point: Not applicable

Flammability limits %: Not applicable

Relative density (H₂O = 1): 1.095

Vapor pressure (mm Hg): <2

pH: <1

Melting Point (Pour Point): <0° C

Vapor Density (Air = 1): Same as water

Evaporation Rate (Water = 1): >1

Solubility in water: Water miscible

Partition Coefficient: n-octanol/water: N/A

Decomposition Temperature (°C): ~200°C

Auto-ignition temperature: Not applicable

Viscosity: N/A

Explosive properties: Not applicable

Oxidizing properties: Not applicable

N/A= Data not available

Super-Kool

10. STABILITY AND REACTIVITY DATA

Stability: Stable under ordinary conditions of use and storage.

Compatibility: (Materials to avoid): Metal containers, strong oxidizers, strong alkalis

Hazardous Decomposition or Byproducts: Hydrogen gas, SO₂

Hazardous Polymerization: Will not occur.

Incompatibilities: Do not mix this product with alkalis or any other material.

Conditions to Avoid: Heat, incompatibles.

11. TOXICOLOGICAL INFORMATION

CAS# 7664-38-2 (Phosphoric acid)

RTECS# Not applicable

ORAL (LD50): Acute: 1530 mg/kg [Rat].

DERMAL (LD50): Acute: 2740 mg/kg [Rabbit].

DUST (LC50): Acute: >850 mg/m³ 1 hours [Rat].

CARCINOGENIC EFFECTS: Not available.

MUTAGENIC EFFECTS: Not available.

ERATOGENIC EFFECTS: Not available.

DEVELOPMENTAL TOXICITY: Not available.

The substance may be toxic to blood, liver, skin, eyes, bone marrow. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

12. ECOLOGICAL INFORMATION

Acute Fish Toxicity: Harmful to aquatic life in very low concentrations. May be dangerous if it enters water intake.

Persistence and degradability: No specific biodegradation test data located. While acidity of this material is readily reduced in natural waters, the resulting phosphate may persist indefinitely or incorporate into biological systems and contribute to eutrophication

Bioaccumulative potential: No data available on bioaccumulation.

Mobility in soil:

Water soluble phosphates, are translocated in the soil over a very short period of time, and being immobilized.

Results of PBT and vPvB assessment

Other adverse effects

Ecotoxicity: Not available

BOD and COD: Not available

Biodegradation Products: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of Biodegradation Products: The products of degradation are less toxic than the product itself.

13. DISPOSAL CONSIDERATIONS

Treat empty containers as hazardous. Dispose of spill clean-up and other wastes in accordance with Federal, State, and local regulations. Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste

Super-Kool

facility. Although not a listed RCRA hazardous waste, this material may exhibit one or more characteristics of a hazardous waste and require appropriate analysis to determine specific disposal requirements. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. TRANSPORT INFORMATION

US DOT: ORM-D

UN/NA: UN3264

Proper Shipping Name: Corrosive liquid, Acidic, Inorganic, N.O.S. (contains phosphoric and sulfamic acids)

Hazard Class: 8

Packing Group: III (Limited Quantity)

IMDG/IMO: UN3264, Corrosive Liquid, Acidic, Inorganic, N.O.S. (Contains phosphoric acid and sulfamic acid), 8, PGIII

ADR/RID/ADN: UN3264, Corrosive Liquid, Acidic, Inorganic, N.O.S. (Contains phosphoric acid and sulfamic acid), 8, PGIII

Environmental hazards: Not an Environmentally Hazardous Substance/Marine Pollutant

Special precautions for user

EmS: F-A, S-B

Emergency Action Code: 2R

Hazard No. (ADR): 80

Tunnel Restriction Code: (E)

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Does not apply

15. REGULATORY INFORMATION



Corrosive

Harmful

Toxic

Risk phrases:

R22: Harmful if swallowed

R34: Causes burns.

R35: Causes severe burns

R36/38: Irritating to eyes and skin

R39/23/24/25: Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed

Safety phrases

S1/2: Keep locked up. Keep out of reach of children

S24/25: Avoid contact with skin and eyes

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

US EPA

Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) requires notification of the National Response Center of release quantities of Hazardous Substances is not required for this material.

Super-Kool

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires emergency planning based on threshold planning quantities and release reporting based on reportable quantities in 40 CFR 355 (used for SARA 302, 304, 311, and 312) is not required for quantities below 250 pounds.

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of annual reports of release of toxic chemicals that appear in 40 CFR 372 (for SARA 313). This material is not subject to reporting requirements.

Toxic Substances Control Act (TSCA) Status: The ingredients of this product are on the TSCA inventory.

State Right to Know

California Proposition 65:

Massachusetts: Hazardous substances and extraordinarily hazardous substances must be identified.

Pennsylvania: Hazardous substances must be identified.

California SCAQMD Rule 443.1 (VOC's): None

Chemical Inventory Status

Ingredient	TSCA	EC	Japan	Australia	Korea	DSL	NDSL
Phosphoric acid	Yes	Yes	Yes	Yes	Yes	Yes	No

Federal, State & International Regulations

Mixture	SARA 302 RQ	TPQ	SARA 313	TSCA	RCRA
	No	No	No	No	No

SARA 311/312: Acute: **Yes** Chronic: **Yes** Fire: **No** Pressure: **No** Reactivity: **Yes (Mixture / Liquid)**

WHMIS: This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations

16. OTHER INFORMATION:

NFPA Ratings: Health: 3 Flammability: 0 Reactivity: 1

Label Hazard Warning:

CORROSIVE POISON! Contains Phosphoric acid, phosphoric acid. May be fatal if swallowed. Harmful if inhaled. Causes burns to skin and eyes.

Label Precautions:

Do not use this product without skin and eye protection.

Do not use this product until you have read all warning statements on bottle and consulted the Safety Data Sheet

Do not use this product unless a source of running water is available.

Keep container closed.

Wash thoroughly after use.

Label First Aid:

If swallowed, **DO NOT INDUCE VOMITING.** Immediately drink 3-4 glasses of water followed by a large glass of citrus juice. Call a physician immediately.

Eyes: flush eyes with running water for at least 15 minutes while lifting lids to rinse the area behind the eyelids. Skin: flush affected area with running water for at least 15 minutes or until skin no longer feels slick while removing contaminated clothing and shoes. Wash clothing before reuse. If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing does not return to normal within a few minutes, get medical attention.

Product Use: Ice machine scale remover.

Super-Kool

This information is, to the best of our knowledge and belief, accurate and reliable as of the date completed. However no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the completeness and suitability of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information, nor do we offer any warranty against patent infringement.