Material Safety Data Sheet

PLASMA QUENCH 44

Date of Preparation: 01/12/2009

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: PLASMA QUENCH 44
Chemical Formula: 5569
General Use:
Manufacturer: Knight Enterprises

PHONE: 708-521-1234
EMERGENCY: 800-535-5053

128 WEST LAKESTREET
NORTHLAKE IL 60164

Section 2 - Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>CAS Number</th>
<th>% wt or % vol</th>
</tr>
</thead>
<tbody>
<tr>
<td>SODIUM NITRITE</td>
<td>7632-00-0</td>
<td>&lt;20%</td>
</tr>
</tbody>
</table>

Trace Impurities:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>NIOSH REL</th>
</tr>
</thead>
<tbody>
<tr>
<td>SODIUM NITRITE</td>
<td>NOT ESTABLISHED</td>
<td>NOT ESTABLISHED</td>
<td></td>
</tr>
</tbody>
</table>

Section 3 - Physical and Chemical Properties

Physical State: LIQUID
Appearance and Odor: GREEN, MILD
Vapor Pressure: N/A
Specific Gravity (H₂O=1, at 4 °C): 1.20
pH: ALKALINE

Water Solubility: 100%
Boiling Point: 212 DEGREE F.
Vapor Density (Air=1): N/A
% Volatile: N/A
Evaporation Rate: N/A

Section 4 - Fire-Fighting Measures

Flash Point: NONE
Flash Point Method: N/A
LEL: NONE
UEL: NONE
Flammability Classification: NONE
Extinguishing Media: WATER SPRAY, CARBON DIOXIDE, DRY CHEMICALS
Unusual Fire or Explosion Hazards: THERMAL DECOMPOSITION RELEASES TOXIC OXIDES OF NITROGEN

Fire-Fighting Instructions: Do not release runoff from fire control methods to sewers or waterways.
Fire-Fighting Equipment: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full facepiece operated in pressure-demand or positive-pressure mode.

Section 5 - Stability and Reactivity

Stability: P is stable at room temperature in closed containers under normal storage and handling conditions.
Polymerization: Hazardous polymerization cannot occur.
Chemical Incompatibilities: AMMONIA, AMINES, REDUCING AGENTS, CYANIDES, COMBUSTIBLE MATERIALS
Conditions to Avoid: NONE KNOWN
Hazardous Decomposition Products: Thermal oxidative decomposition of PLASMA QUENCH 44 can produce OXIDES OF NITROGEN, MAY REACT WITH SECONDARY OR TERTIARY AMINES TO PRODUCE NITROSAMINES.
Section 6 - Health Hazard Information

Potential Health Effects

Primary Entry Routes: INHALATION - SKIN CONTACT - EYE - INGESTION

Acute Effects

Inhalation: DUST OR MIST MAY CAUSE IRRITATION TO THE UPPER RESPIRATORY TRACT AND LUNGS
Eye: WILL CAUSE IRRITATION TO THE EYES
Skin: WILL CAUSE IRRITATION TO THE SKIN
Ingestion: WILL CAUSE IRRITATION TO ALL TISSUES IF INGESTED

Carcinogenicity: IARC, NTP, and OSHA do not list PLASMA QUENCH 44 as a carcinogen.

Medical Conditions Aggravated by Long-Term Exposure: NONE KNOWN

Chronic Effects:

Emergency and First Aid Procedures

Inhalation: REMOVE VICTIM TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION, PREFERABLY MOUTH-TO-MOUTH. IF BREATHING IS DIFFICULT, GIVE OXYGEN. CALL A PHYSICIAN.

Eye Contact: IMMEDIATELY FLUSH EYE WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. HOLD EYELIDS OPEN DURING THIS FLUSHING WITH WATER. CALL A PHYSICIAN IMMEDIATELY.

Skin Contact: FLUSH AREA WITH WATER WHILE REMOVING CONTAMINATED CLOTHES AND SHOES. FOLLOW BY WASHING WITH SOAP AND WATER. DO NOT REUSE CLOTHING OR SHOES UNTIL CLEANED. IF IRRITATION PERSISTS, GET MEDICAL ATTENTION. DO NOT APPLY OILS OR OINTMENTS, UNLESS ORDERED BY PHYSICIAN.

Ingestion: IF CONSCIOUS, DRINK A QUART OF WATER. DO NOT INDUCE VOMITING. CALL A PHYSICIAN IMMEDIATELY. IF UNCONSCIOUS OR IF IN CONVULSIONS, TAKE IMMEDIATELY TO A HOSPITAL OR PHYSICIAN. NEVER INDUCE VOMITING OR GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS VICTIM. AFTER DILUTION WITH WATER, FRUIT JUICE MAY BE ADMINISTERED TO ACCOMPLISH NEUTRALIZATION. SEVERAL GLASSES OF MILK OR SEVERAL OUNCES MILK OF MAGNESIA MAY BE GIVEN FOR THEIR SOOTHING EFFECT. GET MEDICAL ATTENTION.

After first aid, get appropriate in-plant, paramedic, or community medical support.

Note to Physicians: NONE

Special Precautions/Procedures: NONE

Section 7 - Spill, Leak, and Disposal Procedures

Spill /Leak Procedures: USE PROPER SAFETY EQUIPMENT. SWEEP UP MATERIAL INTO CONTAINERS AND DISPOSE OF PROPERLY. AVOID DIRECT DISCHARGE TO SEWERS AND SURFACE WATERS.

Spills

Containment: For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways.

Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Disposal: Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, state, and local regulations.

Disposal Regulatory Requirements: OBSERVE ALL LOCAL, STATE, AND FEDERAL REGULATIONS.

Container Cleaning and Disposal: OBSERVE ALL LOCAL, STATE, AND FEDERAL REGULATIONS. DISPOSE OF AT APPROVED WASTE TREATMENT FACILITY. IF APPROVED NEUTRALIZE MATERIAL AND FLUSH TO SEWER.

Ecological Information:

EPA Regulations:

This information may be subject to the provision reporting requirements of Section 313 of the Superfund Amendment and Reauthorization Act of 1986 (SARA). All sections - CERCLA, RCRA, and OSHA.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls:

Ventilation: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

Administrative Controls:
Respiratory Protection: Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or nonroutine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA. Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres. If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

Protective Clothing/Equipment: Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per OSHA eye- and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Section 9 - Special Precautions and Comments

Handling Precautions: WEAR CHEMICAL SAFETY GOGGLES OR FACE SHIELD WITH SAFETY GOGGLES, AND PROTECTIVE CLOTHING. USE SELF-CONTAINED BREATHING APPARATUS IF NECESSARY. NEVER USE PRESSURE TO EMPTY CONTAINERS. ALL LABELLED HAZARDOUS PRECAUTIONS MUST BE OBSERVED. DO NOT REUSE EMPTY CONTAINER WITHOUT COMMERCIAL CLEANING OR RECONDITIONING.

Storage Requirements: STORE IN COOL, WELL-VENTILATED AREA AWAY FROM HEAT AND OUT OF DIRECT SUNLIGHT. DO NOT STORE OPEN, UNLABELLED, MISLABELLED, OR EMPTY CONTAINERS. KEEP CONTAINERS TIGHTLY CLOSED. STORE AWAY FROM INCOMPATIBLE MATERIALS. DO NOT EAT, DRINK, OR SMOKE IN WORK AREA.

DOT Transportation Data (49 CFR 172.101):

Shipping Name: OXIDIZING LIQUID, N.O.S. (CONTAINS SODIUM NITRITE)
Hazard Class: 5.1
Packing Group: II
Label: OXIDIZER

Prepared By: TKS
Revision Notes:

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