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MATERIAL SAFETY DATA SHEET

READ CAREFULLY BEFORE USING CHEMICAL OSHA requires that this form be kept on file.

Product No. KM 714 M

0.10 N SOLUTION

| | H _e | i He | Health Hazard 2 | Reactivity 0 | illidemmel | Health Hazard 2 | |
|--|----------------|------|-----------------|--------------|------------|-----------------|--|
|--|----------------|------|-----------------|--------------|------------|-----------------|--|

Chemical Synonyms SECTION Formula N mixture

Product Name SILVER NITRATE EDIENTS OF MIXTURES C.A.S. No. See Section II

SECTION II HAZARDOUS INOR Principal Hazardous Component(s) PEL TLV Units

*Silver Nitrate CAS# 7761-88-8

۵ 10 ug (Ag)/m

* chemical subject to the reporting requirements of SARA Title III.

| Vapor Density (Air=1) | Vapor Pressure (mm Hg) N/A | Boiling Point (°F) | Melting Point (*F) | SECTION III |
|-----------------------|----------------------------|-----------------------------------|--|-------------|
| N/A | N/A | N/A | N/A | |
| | Evaporation Rate (=1) | Percent Volatile by Volume (%) | Specific Gravity (H ₂ O=1) 4.35 | |
| | N/A | N/A | 4.35 | |

| | | ŀ |
|------------|-----------------------------|---------------------|
| CECTION IN | Appearance & Odor | Solubility in Water |
| | Colorless, odorless liquid. | Complete |

| Extinguisher Media | (method oseu) | > | SECTION IV |
|--|---------------|-------------------------|--------------------------------|
| Use extinguisher media | | Nonflammable | 400 |
| Use extinguisher media appropriate for surrounding fire. | % by Volume | Flammable Limits in Air | FIRE AND EXPLOSION PAKARU DATA |
| fire. | N/A | Lower | ATA |
| | N/A | Upper | |

Special Firefighting Procedures

Unusual Fire and Explosion Hazards

Toxic gas of nitrogen oxides may be produced

apparatus with full facepiece operated in positive pressure mode. Firefighters should wear proper protective equipment and self-contained breathing

D.O.T.

Silver nitrate solution, 5.1, UN1493, PGII

See Section II

Effects of Overexposure gastrointestinal pain, nausea and vomiting. Contact with skin or eyes may cause irritation. Ingestion may cause

of salt in warm water and repeat until vomit is clear. necessary. INGESTION: Immediately induce vomiting by giving a tablespoo Call a physician. EYES/SKIN: Immediately flush with plenty of water for at lea 15 minutes. INHALATION: Remove to fresh air and assist breathing if

Emergency and First Ald Procedures

Stable 🔍 Unstable 🗆 SECTION VI Stability Conditions to Avoid REACTIVITY DATA

Hazardous Polymerization May Will Not Occur (Materials to Avoid) Hazardous
Decomposition Products Conditions to Avoid NA Oxides of nitrogen. magnesium, phosphine, strong reducing agents. Combustible materials, bromine trifluoride and trichloride,

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be Taken in Case Material is Released or Spilled

disposal. Flush spill area with water. Take up with sand or other non-combustible absorbent material and containerize for

Waste Disposal Method Services State or Local laws. These disposal guidelines are intended for the disposal of catalog-size on Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size on Dispose in accordance with all applicable federal, state and local regulations.

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type) NIOSH approved dust/mist respirator if TLV exceeded.

| Equipment | Ventilation | Agglanical (Agnoral) Rubber Gloves Lab coat | × | ye Protec | Special: Other | Safety Goggles |
|----------------------------|------------------------|---|---|-----------|-------------------|----------------|
| Other Protective Lab coat. | Protective Gloves | Rubber Gloves | | ye Protes | tion | Safety Gogg |
| | Other Protective 16 18 | Lab coat. | | | | |

Precautions to be Taken in Handling & Storing 2.

Keep container out of light. Wash thoroughly after handling

Other Precautions

Do not get on skin or in eyes. Do not breathe fumes or mist

| by Steven C. Cluanox | Effective Date | 11/15/94 | household use. K |
|----------------------|----------------|----------|------------------|
|----------------------|----------------|----------|------------------|

MATERIAL SAFETY DATA SHEET (Eld) Comment

NEAD CAREFULLY BEFORE USING CHEMICAL SHA requires that this form be kept on file.

roduct Name SODIUM HYDROXIDE, 0.1N

| Flammability 0 | |
|-----------------|--|
| Health Hazard 2 | |

Formula Synonyms Chemical NaOH in H₂O Caustic Soda Solution

Sodium Hydroxide C.A.S. #1310-73-2 Principal Hazardous Component(s) roduct No. SA 9746 M NOLLUTION HAZARDOUS INGREDIENTS C.A.S. No. 4 OF MIXTURES See Section II P.E. TLV Units

2 mg/m³

2 mg/m³

| Solubility in Water | Vapor Density (Air=1) | Vapor Pressure (mm Hg) N/A | Bolling Point ('F) | mening Point (F) | | * chemical subject to the reporting requirements of SARA Title III |
|---------------------|-----------------------|----------------------------|-----------------------------------|---|---------------|--|
| Complete | N/A | | | NA | PHYSICAL DATA | g requirements of SARA Title III. |
| | | Evaporation Rate (=1) | Percent Volatile by Volume (%) | Specific Gravity (H ₂ O=1) N/A | | |
| | | N/A | >95% | N/A | | |

Extinguisher | lash Point Method Used) ECTION IV Use extinguishing media appropriate for surrounding fire Colorless, odorless liquid. FIRE AND EXPLOSION HAZARD DATA Flammable Limits in Air % by Volume Lower NA

Appearance & Odor

Complete

-lood with water, do not splatter or splash this material Special Firefighting Procedures

Jnusual Fire and Explosion Hazards

Reacts with most metals to produce hydrogen gas, which can form an explosive nixture with air

T.O.T.

Sodium hydroxide, solution, 8, UN1824, PGII

See Section II

Effects of Overexposure

eyes. Liquid may cause permanent eye damage. Ingestion: Ingestion may cause system, pulmonary edema, or lung inflammation. Liquid may cause burns to skin and severe burning to mouth and stomach. Ingestion may cause nausea and vomiting. Inhalation: Inhalation of vapors may cause severe irritation or burns of the respiratory

Emergency and First Aid Procedures

at least 15 minutes. difficult, give oxygen. In case of contact, immediately flush eyes with plenty of water for of water. Follow with diluted vinegar, fruit juice or whites of eggs, beaten with water. If Call a physician. If swallowed, do not induce vomiting; if conscious, give large amounts Inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is

| SECTION VI | REACTIVITY DATA |
|---|---|
| Stability | Conditions to Avoid |
| Stable 🗘 Unstable 🗘 N/A | N/A |
| Incompatibility (Materials to Avoid) | Strong acids, organic materials, most common metals, zinc, aluminum, magnesium, halogenated hydrocarbons. |
| Hazardous Decomposition Products | N/A |
| May Will Not Occur Occur N/A | Conditions to Avoid N/A |
| SECTION VII Steps to be Taken in Case | SPILL OR LEAK PROCEDURES. |
| Seba to be taken in case | Suppa to be taken in Case Material is Released or Spilled |

dilute HCl. Flush area with flooding amounts of water. (Use caution.) Stop leak if can be done without risk. Ventilate area. Carefully neutralize spill with

Waste Disposal Method

Upper. NA

Discharge, treatment, or disposal may be subject to Federal, State or Local taws. These disposal guidelines are intended for the disposal of catalog-size quantities o Dispose in accordance with all applicable federal, state and local environmental regulation

| SECTION IX SPECIAL | Equipment ** Lab coat, | Protective Gloves Rubber gloves | The state of the s | Ventilation | 一大大学の大学の大学の大学の大学の大学の大学の大学の大学の大学の大学の大学の大学の | (Specify Type) NIOSH ap | SECTION VIII SPECIAL | |
|----------------------|--------------------------------|---------------------------------|--|-------------|---|--|-----------------------|--|
| CORCIAL DDECALLERAND | Lab coat, protective clothing. | | ai) | × | | NIOSH approved respirator if TLV exceeded. | SPECIAL PROTECTION IN | |
| | | Eye Protection | Other | Special | | f TLV exc | FORMAT | |
| | | Safety goggles/faceshield | *************************************** | ••••• | | eeded. | NOI | |

Precautions to be Taken in Handling & Storing

Store in corrosion-proof area. Isolate from incompatible materials. Wash thoroughly after handling

Other Precautions タンスについるシスタル
Read label on container before using. Do not west contact lenses when working with chamicals

30

Approved by

Steven C. Quandt Effective Date

10/20/95 For laboratory use only. Not for drug, fox household use. Keep out of reach of child