

# SAFETY DATA SHEET (SDS)

In accordance with Hazard Communication Standard (HCS), 29CFR 1910.1200(g), 2012 revision

**centrix**<sup>®</sup>  
MAKING DENTISTRY EASIER

## SECTION I - PRODUCT / COMPANY IDENTIFICATION

**Product Name:** SilverSense™ SDF

**Synonyms:** Silver Diamine Fluoride

**Description:** 38% Silver Diamine Fluoride Professional Tooth Desensitizer

**REF:** 310172, 310173

**Company Name:** Centrix, Inc.

**Address:** 770 River Road

**City, State, Zip:** Shelton CT, 06484

**Emergency Telephone Number:** (203) 929-5582

**Information Telephone Number:** (800) 235-5862

## SECTION II – HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

**Appearance:** watery viscosity, clear blue in color with ammonia odor

**Physical Form (General & Specific):** Liquid, specific gravity 1.26

**Immediate Health, Physical and Environmental Hazards:** Light sensitive liquid.

Store in a cool dry place in closed original container. Prolonged exposure to light or evaporation will cause precipitation. 1, GHS08, H372

### POTENTIAL HEALTH EFFECTS

This material is corrosive to metal and glass.

**Eye Contact:** Rinse open eyes with running water for 15 minutes. Seek medical attention immediately.

**Skin Contact:** Remove clothing that has contacted product. Wash exposed area immediately with running water. Calcium containing gel (KY jelly and 10% Calcium Gluconic Acid) may be applied to the area.

**Inhalation:** Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

**Prolonged or repeated exposure may cause:**

**Respiratory Effects:** Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish colored skin (cyanosis), sputum production, changes in lung function tests, and/or respiratory failure. May be absorbed following inhalation and cause target organ effects.

**Ingestion:** May be harmful if swallowed. Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

**Carcinogenicity:** May cause mottled teeth and fluorosis on bones with repeated exposure.

## SECTION III – COMPOSITION, INFORMATION ON INGREDIENTS

### Pictograms:



Corrosive to metal or glass.

**Signal Words:** Causes erosion of glass and metals. Light sensitive liquid. Store in a cool dry place in closed original container.

CAS #	INGREDIENT	PERCENTAGE
34445-07-3	Silver Diamine Fluoride	25-40

## SECTION IV – FIRST AID MEASURES

**Eye Contact:** Flush eyes with large amounts of water. Get medical attention.

**Skin Contact:** Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Get medical attention, if needed. Wash contaminated clothing and clean shoes before reuse. Calcium containing gel (KY jelly and 10% Calcium Gluconic Acid) may be applied to the area.

**Inhalation:** If signs/symptoms develop, get medical attention. Move victim to fresh air, loosen tight clothing, provide oxygen if difficulty breathing.

**If Swallowed:** Do not induce vomiting, give victim 100-200 ml of milk water. Never give anything by mouth to an unconscious person. Get immediate medical attention.

## SECTION V - FIRE-FIGHTING MEASURES

### EXTINGUISHING MEDIA

This material is not flammable. Small fire, use powder, carbon dioxide, or water shower. Large fire, use water shower, water mist or foam extinguisher. May produce irritating, corrosive or toxic fumes.

### PROTECTION OF FIRE FIGHTERS

#### Special Fire Fighting Procedures:

Unusual Fire and Explosion Hazards: Contact with reactive metals may produce flammable hydrogen gas. Firefighters should use protective masks for acidic gases.

## SECTION VI - ACCIDENTAL RELEASE MEASURES

### PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Cover, but do not seal for 48 hours. Recover any material possible into a closed container. Wear protective gloves, mask, boots, goggles and other materials for splash prevention.

### ENVIRONMENTAL PRECAUTIONS

For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Place in a metal, LDPE or HDPE container approved for use in transportation by appropriate authorities. If other material, the container must be lined with polyethylene plastic or contain a plastic drum liner made of polyethylene.

**Clean-up methods:** Observe precautions from other sections. Determine if spill qualifies for local, state or federal reporting.

## SECTION VII - HANDLING AND STORAGE

### HANDLING

Avoid breathing of vapors, mists or spray. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits. If ventilation is not adequate, use respiratory protection equipment. Avoid eye and skin contact. Wash hands after handling and before eating.

### STORAGE

Store in a dark, cool, dry place away from acids, alkaline materials, heat, and bleach. Store containers in a controlled, secure environment and do not agitate drop, drag or otherwise damage containers.

## SECTION VIII - EXPOSURE CONTROLS / PERSONAL PROTECTION

### ENGINEERING CONTROLS

Use with appropriate local exhaust ventilation, or in a well-ventilated area.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

#### EYE/FACE/BODY PROTECTION

Avoid eye contact. The following protection is recommended: safety glasses, gloves, apron/smock/scrubs.

**Skin Protection:** Avoid prolonged or repeated skin contact.

**Respiratory Protection:** Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection. Avoid breathing vapors, mists, or spray.

**Prevention of Swallowing:** Do not ingest. Wash hands after handling and before eating.

### EXPOSURE GUIDELINES

Occupational Safety & Health Administration (OSHA) exposure standards for Silver Diamine Fluoride are:

INGREDIENT	AUTHORITY	TYPE	LIMIT
Silver Diamine Fluoride	OSHA	STEL, as F	2 ppm
Silver Diamine Fluoride	OSHA	TWA, as F	0.5 ppm
FLUORIDES	OSHA	TWA, as F	2.5 mg/m3

## SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

Odor, Color, Grade	Blue transparent liquid with ammonia smell
Physical Form	Liquid
Autoignition Temperature	non flammable
Flash Point	non flammable
Flammable Limits(LEL)	non flammable
Flammable Limits(UEL)	non flammable
Boiling Point	101-103 °C
Density	1.265 – 1.276 g/L
Vapor Density	No Data Available
Vapor Pressure	No Data Available
Specific Gravity	1.26
pH	10 +/- 0.5
Melting Point	Not Applicable
Solubility in Water	this material is water based
Also Soluble in	Ammonia, others unknown
Evaporation Rate	No Data Available
Kow - Oct/Water partition coef	Not Applicable
Viscosity	No Data Available

## SECTION X - STABILITY AND REACTIVITY

**Stability:** Stable in a sealed, opaque, corrosion resistant container.

## CONDITIONS TO AVOID

Heat

## MATERIALS TO AVOID

Acids, Metals, Glass. Causes erosion of glass and metals.

**Hazardous Polymerization:** Hazardous polymerization will not occur.

Electric or static electric discharge will not occur.

## Hazardous Decomposition or By-Products

Substance	Condition
Silicone tetra-fluoride	with contact to glass or silica
Hydrogen gas	with contact to metals
Hydrogen Fluoride	with heating

## SECTION XI - TOXICOLOGICAL INFORMATION

Hazardous ingredients: SILVER DIAMINE FLUORIDE, ORL LD50 520 mg/kg  
CU LD50 380 mg/kg

## SECTION XII - ECOLOGICAL INFORMATION

<b>Ecotoxicity:</b>	Not Determined
<b>Chemical Fate:</b>	Not Determined
<b>Physical:</b>	No information available
<b>Other:</b>	No information available
<b>Mobility:</b>	Readily absorbed into air, water and soil
<b>Persistence and degradability:</b>	No data
<b>Bioaccumulative potential:</b>	No bioaccumulation data

## SECTION XIII - DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** Follow local, regional, state and national guidelines.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

## SECTION XIV - TRANSPORT INFORMATION

Precautions: Avoid direct sunlight; avoid damage to container that can result in fluid leakage. The goods are regulated for transport by IATA, and have limited quantity exceptions and exemptions.

**Commercial packages of SilverSense SDF 38% Silver Diamine Fluoride are exempted from labeling and packaging requirements under 49 CFR 173.154 and 49 CFR 173.203 respectively.**

US DOT	
Shipping Name	Aqueous Silver Diamine Fluoride 38%
Hazard Class	8
UN Number	3267, Corrosive Liquid, basic, organic, n.o.s. (Silver Diamine Fluoride 38%)
Packing Group	PGIII

## SECTION XV - REGULATORY INFORMATION

### US FEDERAL

#### Classification:

Corrosive to metal 1, Skin Corrosive 1B, Eye Damage 1, STOT RE 1

#### TSCA

N/A

#### SARA Codes

34445-07-3

#### 311/312 Hazard Categories:

H290: May be corrosive to metals.

H214: Causes severe skin burns and eye damage.

H318: Causes severe eye damage.

H335: May cause respiratory irritation.

H372: Causes damage to organs (bone, teeth) through prolonged or repeated exposure.

## Precautionary Statements

P260: Do not breathe dust/fume/gas/mist/vapor/spray.

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink, or smoke while handling this product.

P272: Contaminated work clothing should not be allowed out of the work area.

P273: Avoid release to the environment.

P280: Wear protective gloves/clothing/face/eye protection.

## Response Statements

P303 & P361: If on skin or hair, remove contaminated clothing, rinse with water/shower.

P304 & P340: If inhaled, move victim to fresh air in a resting position comfortable for breathing.

P305, P351 & P338: If in eyes, remove contact lenses (if present) rinse with water for several minutes.

P309, P311 & P314: If exposed and you feel unwell, call poison control and seek medical attention immediately.

P363: Wash contaminated clothing before re-use.

P390: Absorb spills to prevent damage.

## Storage & Disposal Statements

P405: Store in a locked location.

P460: Store in a corrosive resistant container with resistant inner liner.

P501: Dispose of contents/container in accordance with local/regional/national regulations.

## Safety Phrases:

S7 Keep container tightly closed.

S24 Avoid contact with skin.

S37 Wear suitable gloves.

## SECTION XVI - OTHER INFORMATION

Handling of product exclusively by dental specialists according to instructions for use.

**CAUTION:** The above information is based on presently available data and to our best knowledge for handling the product under normal conditions. Any use of this product in any way not indicated on this document or using it together with any other process/procedure will be exclusively under the user's responsibility.



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