

WACKER SILICONES CORPORATION
3301 Sutton Road, Adrian, Michigan 49221
24-hour EMERGENCY PHONE NUMBER (517) 264-8500
IN CASE OF A SPILL EMERGENCY, DAY OR NIGHT, CALL CHEMTREC 800-424-9300
For Other Information Call (517) 264-8500

MATERIAL SAFETY DATA SHEET

This Material Safety Data Sheet (MSDS) meets the requirements of the Federal OSHA Hazard Communications Standard (29 CFR 1910.1200).

MSDS ISSUE DATE : 9/20/99
SUPERCEDES MSDS DATED: 6/24/96

SECTION I. PRODUCT IDENTIFICATION

MATERIAL NAME: SEMICOSIL 936UV
CHEMICAL FAMILY: Formulated product
CHEMICAL NAME AND SYNONYMS: Not applicable
FORMULA: Not applicable

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SECTION I A. HAZARDOUS COMPONENTS

| INGREDIENTS | CAS # | OSHA PEL | ACGIH TLV |
|---|------------|----------|-----------|
| Silane, triamine, 1-methyl-N,N',N''-tris (1-methylpropyl) | 37697-65-7 | n.e. | n.e. |
| Sec-butylamine (hydrolysis by-product) | 13952-84-6 | 5 ppm | 5 ppm |

SECTION II PHYSICAL PROPERTIES

BOILING POINT, degrees F: Not determined
VAPOR PRESSURE, 68 deg.F mm. Hg: <1 when cured
VAPOR DENSITY (Air = 1): Not determined
SOLUBILITY IN WATER: Nil
APPEARANCE AND ODOR: Yellow liquid, ammoniacal odor.
SPECIFIC GRAVITY (Water = 1): 1.0
PERCENT VOLATILE (by weight): 6
EVAPORATION RATE (Ether = 1): 54
FLASH POINT, degrees F: 113 (45 degrees C)
(Method used) Pensky-Martens
FLAMMABLE LIMITS IN AIR, % LEL: Not determined
UEL: Not determined

SECTION III. FIRE HAZARDS

This product is considered combustible and is a fire hazard. It supports combustion and decomposes under fire conditions to give off toxic materials. Do not pour, spill or store near heat, spark sources, or open flames.

Flammable vapors may accumulate in the container headspace on formation of hydrolysis by-products.

SECTION IV. FIREFIGHTING TECHNIQUES

Use standard fire fighting techniques to extinguish fires involving this material: use water spray, dry chemicals or carbon dioxide.

As in any fire, prevent human exposure to fire, smoke, fumes, or products of combustion. Evacuate non-essential personnel from the fire area. Fire fighters should wear full-face, self-contained breathing apparatus and impervious protective clothing.

If not leaking, keep fire-exposed containers cool with a water spray to prevent rupture due to excessive heat. High pressure water hose may spread product from broken containers increasing contamination or fire hazard.

SECTION V. TOXICOLOGY

Toxicological testing has not been conducted with this material by Wacker Silicones Corporation.

SECTION VI. HUMAN HEALTH HAZARDS

The following human health hazards apply only to the product as packaged. Please review the discussion of hazards associated with cure and/or hydrolysis by-products also located in this section of the MSDS.

EYE CONTACT: No toxic effects expected.

SKIN CONTACT: No toxic effects expected.

INHALATION: No toxic effects expected.

INGESTION: Not expected in industrial use.

ACUTE EFFECTS OF EXPOSURE: Refer to routes of exposure above.

CHRONIC EFFECTS OF EXPOSURE: None known.

Persons sensitive to a component present at <1.0% may experience an allergic skin reaction when exposed to this material in the presence of ultraviolet or sunlight.

This material does not contain any ingredients listed by IARC, NTP or OSHA as carcinogens in amounts exceeding 0.1%.

There are no data available which address medical conditions that are generally recognized as being aggravated by exposure to this product.

This product releases secondary-butylamine upon moisture curing. Exposure to butylamine may cause irritation of the eyes, mucous membranes and skin. Direct contact with the eyes and skin will cause burns and may cause permanent damage. Effects of overexposure include eyes, nose, and throat irritation; headache and flushing of the skin of the face; skin burns. Secondary-butylamine is no longer released upon cure completion.

SECTION VII. FIRST AID

EYE CONTACT: In case of contact, flush eyes well with water for 15 minutes. Obtain medical attention if irritation occurs.

SKIN CONTACT: Remove as much of the material as possible using mechanical/waterless methods before washing with water. Seek medical attention for any burns or irritation resulting from contact with cure by-products.

INHALATION: If inhaled, remove to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing. Get medical attention.

INGESTION: Never give an unconscious person anything to drink. If unconscious, treat for shock. Notify a physician or the nearest poison control center immediately. If conscious, have the person rinse his mouth with cold water. If conscious, induce vomiting by using a finger or other object such as a spoon to tickle the back of the throat. If unconscious and vomiting, turn the person on his side to avoid choking.

SECTION VIII. INDUSTRIAL HYGIENE

The recommendations described in this section are provided as general guidance for minimizing exposure when handling this product. Because use conditions will vary depending upon customer applications, specific safe handling procedures should be developed by a person knowledgeable of the intended use conditions and equipment. During the development of safe handling procedures, consideration should be given to the need for cleaning of equipment and piping systems to render them nonhazardous before maintenance and repair activities are performed.

ENGINEERING CONTROLS: When the need for engineering controls is indicated by the conditions under which the product is used, one or more of the following techniques may be selected to limit employee exposure: general ventilation, local exhaust ventilation, enclosure or confinement of the operation, and/or process isolation with remote control operation.

INGESTION: Open containers of food and beverages should be kept away from areas where the product is used or stored. Eating, drinking, smoking, and application of cosmetics should be prohibited in areas where the product is being used. Before eating, hands and face should be washed to remove residual contamination.

SKIN CONTACT: Skin contact should be minimized through the use of

gloves and suitable long-sleeved clothing selected with regard for use condition exposure potential.

EYE CONTACT: Eye contact should be avoided through the use of chemical safety glasses, goggles, or a face shield selected with regard for use condition exposure potential.

INHALATION: If the product is used under conditions which generate airborne contamination, these processing operations should be carried out in open, well-ventilated areas, or in enclosed areas equipped with local exhaust ventilation. If adequate ventilation is not available, employees should be provided with appropriate, approved, air-purifying or supplied-air respirators selected in accordance with NIOSH guidelines.

EXPOSURE LIMITS: No exposure limit has been established for this material. Exposure limits for its hazardous components, if any, are listed in Section IA on page one.

SECTION IX. CHEMICAL REACTIVITY

Hydrolyzes slowly at ambient temperatures, when exposed to moist air, to release secondary butylamine. Keep container closed to prevent exposure to air.

SECTION X. STABILITY

Stable at ambient temperatures and atmospheric pressure.

HAZARDOUS/THERMAL DECOMPOSITION PRODUCTS: SiO₂, CO, CO₂, formaldehyde and various hydrocarbon fragments.

SECTION XI. SPILL HANDLING

Eliminate all ignition sources. Control the source of the spill if it is safe to do so.

Make sure all personnel involved in the spill cleanup follow good industrial hygiene practices (refer to SECTION VIII: INDUSTRIAL HYGIENE).

Any person entering either a significant spill area or an unknown concentration of vapor or aerosol should use a positive-pressure, self-contained breathing apparatus or a positive-pressure, supplied-air respirator with escape pack.

Small spills can be handled routinely. Use adequate ventilation and wear a NIOSH-approved respirator with dust, mist and fume filter to prevent inhalation exposure. Wear protective clothing to prevent skin and eye contact. Use the following procedures:

Absorb spill with sand or Fuller's earth. Sweep up and place in an appropriate chemical waste container. Flush spill area with water. Observe all local, state, and federal laws and regulations regarding disposal, spill, cleanup, removal, or discharge.

(See SECTION XIV: DISPOSAL OF UNUSED MATERIAL)

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(800-424-9300).

SECTION XII. CORROSIVITY TO MATERIALS OF CONSTRUCTION

Noncorrosive to materials commonly used in the construction of process equipment, storage and shipping containers.

SECTION XIII. STORAGE REQUIREMENTS

Prolonged storage at elevated temperatures should be avoided. Care should be taken to prevent moisture condensation in the container. Keep away from heat, sparks or open flame. Never use welding or cutting torch on or near any container (even empty) as an explosion can occur.

Open container with care. Flammable vapors may be present in the container headspace as a result of the formation of hydrolysis by-products.

SECTION XIV. DISPOSAL OF UNUSED MATERIAL

Material that cannot be used or chemically reprocessed should be disposed of at an approved facility in accordance with any applicable regulations under the Resource Conservation and Recovery Act (RCRA). Note: State and local regulations may be more stringent than those under RCRA.

If this product becomes a waste, it is considered a hazardous waste due to its ignitability.

SECTION XV. DISPOSAL OF CONTAINER

Dispose of empty containers according to any applicable regulations under the Resource Conservation and Recovery Act (RCRA). NOTE: State and local regulations may be more stringent than those under RCRA.

Empty containers may contain residual material. Do not reuse containers unless properly reconditioned.

SECTION XVI. REGULATORY INFORMATION

TSCA: This material or its components are listed on the TSCA Chemical Substance Inventory and is in compliance with all applicable rules and orders. One or more of the components may be exempt from listing on the TSCA Inventory.

SARA: This material does not contain any substances on the list of Toxic Chemicals subject to Section 313 of the Superfund Amendments and Reauthorization Act of 1986 (SARA Title III), in excess of the

applicable de minimis concentrations as specified in Section 372.38(a).

RCRA Hazard Class: Not regulated.

Special note for Department of Transportation (DOT): Wacker Silicones Corporation has elected to reclassify this material, using the combustible exception 49 CFR 173.150 (f). For further information on this exception, please call the information phone number on this MSDS.

Proper shipping name: Less than 119 gallons per container - not regulated.

Technical Name(s): (Aminosilane)

Hazard Classification: Combustible liquid

UN/NA Number: NA 1993

Label Required: None

Hazardous Substance RQ (Name): Not applicable

Inhalation Hazard (173.3a (b)): Not applicable

This material or its components are listed on the Canadian Domestic Substance List (DSL) or are in compliance with the DSL.

CANADIAN INGREDIENT DISCLOSURE LIST: This material contains the following listed component in a quantity greater than the specified weight-to-weight concentration: Amorphous fumed silica.

CALIFORNIA PROPOSITION 65: This material does not contain any substances known to the State of California to cause cancer or reproductive effects.

MASSACHUSETTS SUBSTANCE LIST: This material contains the following listed components:

Amorphous fumed silica

PENNSYLVANIA HAZARDOUS SUBSTANCE LIST: This material contains the following listed components:

Amorphous fumed silica

NEW JERSEY R-T-K HAZARDOUS SUBSTANCE LIST: This material contains the following listed components:

Amorphous fumed silica

Hazardous Materials Identification System (HMIS)
(for material as packaged):

Health Hazard = 0
Flammability Hazard = 2
Reactivity Hazard = 1
Personal Protection = B

Hazardous Materials Identification System (HMIS)
(based on contact with hydrolysis/cure by-product)

Health Hazard = 3
Flammability Hazard = 3
Reactivity Hazard = 0
Personal Protection = H

NOTE: Respiratory protection is recommended in the event that ventilation or engineering controls are unable to maintain exposures below recommended levels, or in the event of a spill

or other emergency situation.

Hazardous Materials Identification System and HMIS are registered trademarks of the National Paint and Coatings Association.

SECTION XVII. ADDITIONAL INFORMATION

n.e. = Not established; n.a. = Not applicable/not available; n.d. = Not determined; TLV = Threshold Limit Value; PEL = Permissible Exposure Limit; OSHA = Occupational Safety and Health Administration; ACGIH = American Conference of Governmental Industrial Hygienists; LEL = Lower Explosive Limit; UEL = Upper Explosive Limit; ppm = parts per million; TSCA = Toxic Substances Control Act; SARA = Superfund Amendments and Reauthorization Act; DOT = Department of Transportation.

This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief accurate and reliable as of the date compiled. However, no representation, warranty or guarantee, expressed or implied, is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness 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. Nothing herein shall be construed as a recommendation for uses which infringe valid patents or as extending a license under valid patents.