

Safety Data Sheet

Material: 70702069

SEMICOSIL® 960 RED

Version: 2.1 (US)

Date of print: 08/09/2016

Date of last alteration: 06/23/2015

1. Product and company identification**1.1 Identification of the substance or preparation:**

Commercial product name: SEMICOSIL® 960 RED
Product group: RTV Dispersion Coating
Use of substance / preparation: Industrial.
 electronic coating

1.2 Company/undertaking identification:

Manufacturer/distributor: Wacker Chemical Corporation
 3301 Sutton Road
 Adrian, MI 49221-9397
 USA

Customer information: InfoLine:
 Tel (517) 264-8240, Fax (517) 264-8740
 Hours of operation:
 Monday - Friday, 8 am to 5 pm (eastern standard time)
 Corporate website: www.wacker.com

Emergency telephone no. (24h): (517) 264-8500
Transportation emergency: (800) 424-9300 (CHEMTREC, USA)
 (703) 527-3887 (CHEMTREC, international)

This SDS was prepared by the Regulatory Affairs and Product Safety Department (RAPS) of Wacker Chemical Corporation.

2. Hazards identification**2.1 Classification of the substance or mixture****Classification (GHS):**

Class	Category	Route of exposure
Aspiration hazard	Category 1	
Specific target organ toxicity (single exposure)	Category 3 (narcotic effects)	
Skin sensitization	Category 1B	
Serious eye damage / eye irritation	Category 2A	
Skin corrosion/irritation	Category 2	
Flammable liquids	Category 2	

2.2 Label elements**Labelling (GHS):****Pictogram(s):**

Signal Word: Danger

H-Code	Hazard Statements
H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness and dizziness.

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P-Code	Precautionary Statements
P103	Read label before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P243	Take precautionary measures against static discharge.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P310	Immediately call a POISON CENTER/doctor.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P302+P352	IF ON SKIN: Wash with plenty of water/soap.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P370+P378	In case of fire: use water spray, extinguishing powder, foam or carbon dioxide to extinguish.
P403+P235	Store in a well-ventilated place. Keep cool.
P404	Store in a closed container.
P501	Dispose of contents/container to waste disposal.

2.3 Other hazards

No data available.

3. Composition/information on ingredients

3.1 Chemical characterization (preparation)

Chemical characteristics

Polydimethylsiloxane + auxiliary + Aminosilane + solvent

3.2 Information on ingredients:

Type	CAS No.	Substance	Content [wt. %]		Note
			Lower	Upper	
INHA	64742-49-0	Hydrocarbon mixture		<=30.0	
INHA	15901-40-3	Methyl tricyclohexylamino silane		<=4.0	
INHA	1760-24-3	Amino alkoxysilane		<=0.25	

Type: HYD - by-product upon hydrolysis, INHA - ingredient, NEBE - by-product, MONO - residual monomer, VERU - impurity, VUL - by-product upon vulcanization. ***** Note:** C1 - IARC carcinogen, C2 - NTP carcinogen, C3 - OSHA carcinogen, NH - non-hazardous, R - reproductive toxin.

Substances listed in the Subsections "HAPS" and "California Proposition 65 Carcinogens / Reproductive Toxins" that are not listed in this section are only present at quantities below 0.1% for California Proposition 65 listed toxins or below 1% for non-carcinogenic HAPS or they are inextricably bound in the product.

4. First-aid measures

4.1 General information:

Get medical attention if irritation or other symptoms occur. Before seeking medical attention remove contaminated clothing and shoes. Take a copy of the Safety Data Sheet when going for medical treatment.

4.2 After inhalation

If inhaled remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult give oxygen.

4.3 After contact with the skin

For skin contact, immediately wipe away excess material. Use a waterless hand cleaner to remove as much of the remaining material as possible. Wash with soap and water.

4.4 After contact with the eyes

If contact with eyes, immediately hold eyelids apart and flush with plenty of water for at least 15 min.

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4.5 After swallowing

For Ingestion, do not attempt to induce vomiting. If conscious, have them rinse their mouth with water but do not give anything to drink. Danger of aspiration. Get medical attention.

5. Fire-fighting measures

5.1 Flammable properties:

Property:	Value:	Method:
Flash point.....	21 °C (69 °F)	(ASTM D93)
Boiling point / boiling range	117.78 °C (244 °F)	
Lower explosion limit (LEL)	0.9 %(V)	
Upper explosion limit (UEL).....	6.7 %(V)	
Ignition temperature	not determined	
NFPA Hazard Class (comb./flam.liquid)	IB	

5.2 Fire and explosion hazards:

Warning! Flammable liquid and vapor. Vapors are heavier than air and may travel along the ground, be moved by ventilation systems, settle in pits or low areas, and be ignited by ignition sources distant from the handling point. The material is lighter than water, burning spilled material will float on top of any water released from hose or sprinkler systems spreading the fire beyond the initial fire response area. Consider possible formation of explosive mixtures with air, for example in uncleaned containers.

5.3 Recommended extinguishing media:

AFFF alcohol compatible foam. Carbon dioxide. Dry chemical.

5.4 Unsuitable extinguishing media:

sharp water jet .

5.5 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases

Hazardous combustion products: Various hydrocarbon fragments , carbon dioxide , formaldehyde , carbon monoxide , silicon dioxide .

5.6 Fire fighting procedures:

Fire fighters should wear full protective clothing including a positive pressure self-contained breathing apparatus. Cool endangered containers with water. In case of fire remove container out of endangered area.

6. Accidental release measures

6.1 Precautions:

Shut down all sources of ignition in the area of the spill. Wear personal protection equipment (see section 8). Avoid contact with eyes and skin. Avoid inhaling mists and vapours. If material is released indicate risk of slipping.

HAZWOPER PPE Level: C

6.2 Containment:

Prevent material from entering surface waters, drains or sewers and soil. Contain any fluid that runs out using suitable material (e.g. earth). Retain contaminated water/extinguishing water. Dispose of in prescribed marked containers. Cover openings to underground drains and sewers.

Spills of material which could reach surface waters must be reported to the United States Coast Guard National Response Center's toll free phone number (800) 424-8802.

6.3 Methods for cleaning up

Do not flush away with water. In the event of a large spill, this material will float on the water's surface. Take up mechanically and dispose of according to local/state/federal regulations. For small amounts: Absorb with a liquid binding material such as diatomaceous earth and dispose of according to local/state/federal regulations. Contain larger amounts and pump up into suitable containers. Use non-sparking equipment to clean up spills of flammable materials. Exhaust vapours.

6.4 Further information:

Eliminate all sources of ignition.

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7. Handling and storage

7.1 Handling

Precautions for safe handling:

Keep away from heat, sparks and flame. Keep container closed when not in use.

Precautions against fire and explosion:

Flammable vapors may accumulate and form explosive mixtures with air in containers, process vessels, including partial, empty and uncleaned containers and vessels, or other enclosed spaces. Keep away from heat, sparks and flame. Take precautionary measures against electrostatic charging. Do not weld, cut, or grind on empty containers. Cool endangered containers with water.

7.2 Storage

Conditions for storage rooms and vessels:

Nitrogen blanket, pad, or purge containers to prevent flammable air-vapor mixtures from forming in the container headspace. Do not store flammable liquids in plastic IBCs (i.e. Intermediate Bulk Containers or plastic tote tanks). Containers used to dispense flammable liquids should be equipped with flash arrestors and self closing spigots. Make sure there is no possibility of entering the ground.

Advice for storage of incompatible materials:

Do not store together with oxidizing agents like peroxides etc. Do not store with: Fire-promoting materials . Keep away from water.

Further information for storage:

Do not weld, cut, or grind on empty containers. Store flammable liquids in a cool, dry, fire protected storage area, free from sources of ignition, away from compressed or liquid oxygen or other oxidizing agents (e.g. organic peroxides, concentrated oxidizing inorganic acids). Store in the original container. Store in a cool, temperature regulated location. Store in a well ventilated area to limit the accumulation of vapors released from vented or unsealed containers.

8. Exposure controls and personal protection

8.1 Engineering controls

Ventilation:

General ventilation sufficient to provide 1 CFM per square foot of floor area or 6 room air exchanges per hour is recommended.

Local exhaust:

To control flammable/combustible vapors: Local exhaust ventilation which meets the requirements of ANSI Z9.2 is recommended to control airborne contaminants at the point of use. (to maintain concentration below TLV)

8.2 Associate substances with specific control parameters such as limit values

Maximum airborne concentrations at the workplace:

CAS No.	Material	Type	mg/m ³	ppm	Dust fract.
108-91-8	Cyclohexylamine	ACGIH TWA		10.0	

8.3 Personal protection equipment (PPE)

Respiratory protection:

A NIOSH approved air purifying respirator equipped with universal multi-contaminant multi-gas/vapor cartridges is recommended if overexposure to chemical vapors could occur. If eye-irritating dusts or vapors are present, a full-face respirator should be worn.

Hand protection:

butyl rubber protective gloves

Eye protection:

Safety glasses with side shields. Additional eye and face protection, splash-proof goggles, hood, full-faced respirator, or face shield is recommended if splashing could occur.

Other protective clothing or equipment:

Provide eye bath and safety shower. Additional skin protection, such as SARANEX coated Tyvek apron, over-sleeves, lab coat, coveralls, or protective suit should be worn if splashing could occur.

8.4 General hygiene and protection measures:

Avoid contact with eyes, skin and clothing. Avoid breathing dust/vapor/mist/gas/aerosol. Wash thoroughly after handling.

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9. Physical and chemical properties**9.1 Appearance**

Physical state / form : liquid - viscous
 Colour..... : red
 Odour : solvent like/oily

9.2 Safety parameters

Property:	Value:	Method:
Melting point / melting range	not determined	
Boiling point / boiling range	117.78 °C (244 °F)	
Flash point.....	21 °C (69 °F)	(ASTM D93)
Ignition temperature	not determined	
Lower explosion limit (LEL)	0.9 %(V)	
Upper explosion limit (UEL).....	6.7 %(V)	
Vapour pressure.....	34.663720 hPa	
Density	0.93 g/cm ³	
Water solubility / miscibility.....	insoluble	
pH-Value	not applicable	
Viscosity (dynamic)	approx. > 4000 mPa.s at 25 °C (77 °F)	

9.3 Further information

Percent Volatiles	33 %	
VOC	295 g/l	(calculated value)
VOC Released During Cure	27 g/l	(Estimated Value)

10. Stability and reactivity**10.1 General information:**

Stable under normal conditions of use.

10.2 Conditions to avoid

Keep away from incompatible substances.

10.3 Materials to avoid

Strong acids. Bases (alkali or caustic materials). Oxidizing materials (oxygen, oxidizers, peroxides, etc.). Ammonia and other amines.

10.4 Hazardous decomposition products

Cyclohexylamine is released upon contact with water.

10.5 Further information:

Hazardous polymerization cannot occur.

11. Toxicological information**11.1 Information on toxicological effects****11.1.1 Acute toxicity****Product details:**

Route of exposure	Result/Effect	Species/Test system	Source
oral	LD ₅₀ : 4640 mg/kg	rat	Conclusion by analogy

11.1.2 Skin corrosion/irritation**Assessment:**

Irritation of the skin must be expected. Due to a strong adherence to the skin symptoms of skin corrosion cannot be excluded after removing the substance mechanically.

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Product details:

Result/Effect	Species/Test system	Source
Symptoms of skin corrosion were observed. Based on the adherent properties of the substance the relevance must be questioned.	rabbit; 4 h	Conclusion by analogy
not corrosive	Corrositex	Conclusion by analogy

11.1.3 Serious eye damage / eye irritation

Assessment:

After contact to the eyes irritation of the eye must be expected.

Product details:

Result/Effect	Species/Test system	Source
irritating	rabbit	test report

11.1.4 Respiratory or skin sensitization

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.5 Germ cell mutagenicity

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.6 Carcinogenicity

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.7 Reproductive toxicity

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.8 Specific target organ toxicity (single exposure)

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.9 Specific target organ toxicity (repeated exposure)

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.10 Aspiration hazard

Assessment:

Based on the physical-chemical properties of the product no aspiration hazard must be expected.

11.1.11 Further toxicological information

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Other information: According to literature aliphatic hydrocarbons are slightly irritating to the skin and mucuous membranes and have a skin drying and narcotic effect. If the lungs are directly affected (e.g. by aspiration), inflammation of the lungs may occur. Hydrolysis product / impurity: Cyclohexylamine (CAS RN 108-91-8) is corrosive to skin and eyes and shows moderate toxic effects after oral administration as well as distinct toxic effects after dermal administration. Exposure to vapour causes irritation of the upper respiratory tract and the eyes. In animal experiments reproductive effects were observed (EU: Repr. 2; H361).

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12. Ecological information**12.1 Toxicity****Assessment:**

For the product as a whole, no test data is available.

12.2 Persistence and degradability**Assessment:**

Silicone content: biologically not degradable. Separation by sedimentation.

12.3 Bioaccumulative potential**Assessment:**

Polymer component: Bioaccumulation is not expected to occur.

12.4 Mobility in soil**Assessment:**

Silicone content: Absorbed by floating particles. Separation by sedimentation.

12.5 Other adverse effects

none known

13. Disposal considerations**13.1 RCRA Waste Classification:**

D001 (Ignitable)

This classification applies only to the material as it was originally produced.

13.2 Product disposal**Recommendation:**

Dispose of according to regulations by incineration in a special waste incinerator. Observe local/state/federal regulations.

13.3 Packaging disposal**Recommendation:**

Completely discharge containers (no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local/state/federal regulations. Uncleaned packaging should be treated with the same precautions as the material. Uncleaned containers should not be reused to hold another material due to the potential for reaction between residual product and incompatible materials.

14. Transport information**14.1 US DOT & CANADA TDG SURFACE**

Valuation	Dangerous Goods
Proper Shipping Name	Flammable liquid, n.o.s.
Technical name	(contains petroleum naphtha)
Class	3
UN no.	1993
Packaging Group.....	II
Label	**TL:flammable liquid/3
NAERG Guide	128
Other Information	The Fish & Tree marine pollutant mark is required on bulk containers in ground transportation, and on both bulk and non-bulk containers when shipping by water.

14.2 Transport by sea IMDG-Code

Valuation	Dangerous Goods
Class	3
Packaging Group.....	II
UN no.	1993

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Proper Shipping Name: Flammable liquid, n.o.s.
 Technical name: (contains petroleum naphtha)
 Marine Pollutant: yes

14.3 Air transport ICAO-TI/IATA-DGR

Valuation: Dangerous Goods
 Class: 3
 UN no.: 1993
 Proper Shipping Name: Flammable liquid, n.o.s.
 Technical name: (contains petroleum naphtha)
 Packaging Group.....: II

15. Regulatory information**15.1 U.S. Federal regulations****TSCA inventory status and TSCA information:**

This material or its components are listed on or are in compliance with the requirements of the TSCA Chemical Substance Inventory.

TSCA 12(b) Export Notification:

This material does not contain any TSCA 12(b) regulated chemicals.

CERCLA Regulated Chemicals:

This material does not contain any CERCLA regulated chemicals.

SARA 302 EHS Chemicals:

This material does not contain any SARA extremely hazardous substances.

SARA 311/312 Hazard Class:

Fire hazard. Immediate (acute) health hazard. Delayed (chronic) health hazard.

SARA 313 Chemicals:

This material does not contain any SARA 313 chemicals above de minimus levels.

HAPS (Hazardous Air Pollutants):

CAS No.	Chemical	Upper limit wt. %
108-88-3	Toluene	<=0.0379
67-56-1	Methanol	<=0.0002

15.2 U.S. State regulations**California Proposition 65 Carcinogens:**

This material does not contain any chemicals known to the state of California to cause cancer.

California Proposition 65 Reproductive Toxins:

108-88-3 Toluene
 67-56-1 Methanol

Massachusetts Substance List:

112945-52-5 Silica, amorphous, fumed
 1309-37-1 Iron oxide

New Jersey Right-to-Know Hazardous Substance List:

112945-52-5 Silica, amorphous, fumed
 1309-37-1 Iron oxide

Pennsylvania Right-to-Know Hazardous Substance List:

112945-52-5 Silica, amorphous, fumed
 1309-37-1 Iron oxide

15.3 Canadian regulations

This product has been classified in accordance with the Hazard criteria of the CPR and the SDS contains all the information required by the CPR.

WHMIS Hazard Classes:

B2, D2B

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DSL Status:

This material or its components are listed on the Canadian Domestic Substances List.

15.4 Details of international registration status

Relevant information about individual substance inventories, where available, is given below.

Canada.....	: DSL (Domestic Substance List): This product is listed in, or complies with, the substance inventory.
United States of America (USA).....	: TSCA (Toxic Substance Control Act Chemical Substance Inventory): This product is listed in, or complies with, the substance inventory.
Australia	: AICS (Australian Inventory of Chemical Substances): This product is listed in, or complies with, the substance inventory.
South Korea (Republic of Korea).....	: ECL (Existing Chemicals List): This product is listed in, or complies with, the substance inventory.
People's Republic of China	: IECSC (Inventory of Existing Chemical Substances in China): This product is listed in, or complies with, the substance inventory.
Japan	: ENCS (Handbook of Existing and New Chemical Substances): This product is listed in, or complies with, the substance inventory.
Philippines.....	: PICCS (Philippine Inventory of Chemicals and Chemical Substances): This product is listed in, or complies with, the substance inventory.
European Economic Area (EEA).....	: REACH (Regulation (EC) No 1907/2006): General note: the registration obligations for substances imported into the EEA or manufactured within the EEA by the supplier mentioned in section 1 are fulfilled by the said supplier. The registration obligations for substances imported into the EEA by customers or other downstream users must be fulfilled by the latter.

16. Other information**16.1 Additional information:**

This Safety Data Sheet (SDS) meets the requirements of the Federal OSHA Hazard Communication Standard (29 CFR 1910.1200). This product has been classified according to the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by the CPR. 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. This SDS provides selected regulatory information on this product, including its components. This is not intended to include all regulations. It is the responsibility of the user to know and comply with all applicable rules, regulations and laws relating to the product being used.

Vertical lines in the left-hand margin indicate changes compared with the previous version.

All deliveries are subject to the WACKER SILICONES Health Care Policy, which is available at www.wacker.com.**16.2 Glossary of Terms:**

ACGIH - American Conference of Governmental Industrial Hygienists

DOT - Department of Transportation

hPa - Hectopascals

mPa*s - Milli Pascal-Seconds

OSHA - Occupational Safety and Health Administration

PEL - Permissible Exposure Limit

ppm - Parts per Million

SARA - Superfund Amendments and Reauthorization Act

STEL - Short Term Exposure Limit

TSCA - Toxic Substances Control Act

TWA - Time Weighted Average

WHMIS - Canadian Workplace Hazardous Materials

Identification System

Flash point determination methods.....

ASTM D56.....

ASTM D92, DIN 51376, ISO 2592.....

ASTM D93, DIN 51758, ISO 2719.....

ASTM D3278, DIN 55680, ISO 3679.....

DIN 51755.....

Common name

Tagliabue (Tag) closed cup

Cleveland open cup

Pensky-Martens closed cup

Setaflash or Rapid closed cup

Abel-Pensky closed cup

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16.3 Conversion table:

Pressure:..... : 1 hPa * 0.75 = 1 mm Hg = 1 torr; 1 bar = 1000 hPa

Viscosity:..... : 1 mPa*s = 1 centipoise (cP)