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#### 1. Identification

Product name : Sikasil® WS-295

Supplier : Sika Corporation

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USA

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INTERNATIONAL: 703-527-3887

Recommended use of the chemical and restrictions on

use

: For further information, refer to product data sheet.

#### 2. Hazards identification

## **GHS Classification**

Flammable liquids, Category 4 H227: Combustible liquid.

Eye irritation, Category 2A
Skin sensitization, Category 1
Reproductive toxicity, Category 2
Specific target organ systemic toxicity - repeated exposure, Category 2 (Oral)

H319: Causes serious eye irritation.
H317: May cause an allergic skin reaction.
H361f: Suspected of damaging fertility.
H373: May cause damage to organs through prolonged or repeated exposure if swallowed.

## **GHS** label elements

Hazard pictograms :





Signal Word : Warning

Hazard Statements : H227 Combustible liquid.

H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H361f Suspected of damaging fertility.

H373 May cause damage to organs through prolonged or

repeated exposure if swallowed.

Precautionary Statements : Prevention:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read



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and understood.

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.

P264 Wash skin thoroughly after handling.

P272 Contaminated work clothing must not be allowed out of the workplace.

P280 Wear protective gloves/ eye protection/ face protection.

P281 Use personal protective equipment as required.

## Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308 + P313 IF exposed or concerned: Get medical advice/attention.

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

P337 + P313 If eye irritation persists: Get medical advice/attention.

P363 Wash contaminated clothing before reuse.

P370 + P378 In case of fire: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment for extinction.

#### Storage:

P403 + P235 Store in a well-ventilated place. Keep cool. P405 Store locked up.

#### Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

See Section 11 for more detailed information on health effects and symptoms.

There are no hazards not otherwise classified that have been identified during the classification process.

There are no ingredients with unknown acute toxicity used in a mixture at a concentration >= 1%.

#### 3. Composition/information on ingredients

#### Hazardous ingredients

Chemical name	CAS-No.	Concentration (%)
2-butanone-O,O',O"-(phenylsilylidyne)trioxime	34036-80-1	>= 2 - < 5 %
butan-2-one-O,O',O"-(methylsilylidyne)trioxime	22984-54-9	>= 1 - < 2 %
N-(2-aminoethyl)-N'-[3-	35141-30-1	>= 1 - < 2 %
(trimethoxysilyl)propyl]ethylenediamine		
octamethylcyclotetrasiloxane	556-67-2	< 1 %

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.



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#### 4. First aid measures

If inhaled : Move to fresh air.

Consult a physician after significant exposure.

In case of skin contact : Take off contaminated clothing and shoes immediately.

Wash off with soap and plenty of water. If symptoms persist, call a physician.

In case of eye contact : Immediately flush eye(s) with plenty of water.

Remove contact lenses.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

If swallowed : Clean mouth with water and drink afterwards plenty of water.

Do not induce vomiting without medical advice.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

Obtain medical attention.

Most important symptoms and effects, both acute and

delayed

: irritant effects sensitizing effects

Allergic reactions

Excessive lachrymation

See Section 11 for more detailed information on health effects

and symptoms.

May cause an allergic skin reaction. Causes serious eye irritation. Suspected of damaging fertility.

May cause damage to organs through prolonged or repeated

exposure if swallowed.

Protection of first-aiders : Move out of dangerous area.

Consult a physician.

Show this material safety data sheet to the doctor in

attendance.

Notes to physician : Treat symptomatically.

#### 5. Fire-fighting measures

Suitable extinguishing media : Carbon dioxide (CO2)

Unsuitable extinguishing

media

: Water

Specific extinguishing

methods

: Collect contaminated fire extinguishing water separately. This

must not be discharged into drains.

Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.

Special protective equipment

for fire-fighters

: In the event of fire, wear self-contained breathing apparatus.



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#### 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Environmental precautions : Use personal protective equipment. Deny access to unprotected persons.

Do not flush into surface water or sanitary sewer system.
 Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up

: Soak up with inert absorbent material (e.g. sand, silica gel,

acid binder, universal binder, sawdust).

Keep in suitable, closed containers for disposal.

## 7. Handling and storage

Advice on safe handling : Do not breathe vapors or spray mist.

Avoid exceeding the given occupational exposure limits (see

section 8).

Do not get in eyes, on skin, or on clothing. For personal protection see section 8.

Persons with a history of skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is

being used.

Smoking, eating and drinking should be prohibited in the

application area.

Follow standard hygiene measures when handling chemical

products.

Conditions for safe storage : Store in original container.

Keep in a well-ventilated place. Observe label precautions.

Store in accordance with local regulations.

Materials to avoid : No data available

#### 8. Exposure controls/personal protection

Component	CAS-No.	Basis **	Value	Exposure limit(s)* / Form of exposure
calcium carbonate	471-34-1	CAL PEL	PEL	10 mg/m3 Total dust
		CAL PEL	PEL	5 mg/m3 respirable dust fraction



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\*The above mentioned values are in accordance with the legislation in effect at the date of the release of this safety data sheet.

#### \*\*Basis

ACGIH. Threshold Limit Values (TLV)

OSHA Po. Table Z-1, Limit for Air Contaminat (1989 Vacated Values)

OSHA P1. Permissible Exposure Limits (PEL), Table Z-1, Limit for Air Contaminant

OSHA P2. Permissible Exposure Limits (PEL), Table Z-2

OSHA Z3. Table Z-3, Mineral Dust

#### **Engineering measures**

: Use of adequate ventilation should be sufficient to control worker exposure to airborne contaminants. If the use of this product generates dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any

recommended or statutory limits.

The engineering controls also need to keep gas, vapor or dust

concentrations below any lower explosive limits.

## Personal protective equipment

Respiratory protection

 Use a properly fitted NIOSH approved air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

The filter class for the respirator must be suitable for the maximum expected contaminant concentration

(gas/vapor/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-contained

breathing apparatus must be used.

Hand protection Remarks

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is

necessary.

Eye protection : Safety eyewear complying with an approved standard should

be used when a risk assessment indicates this is necessary.

Skin and body protection : Choose body protection in relation to its type, to the

concentration and amount of dangerous substances, and to

the specific work-place.

Hygiene measures : Avoid contact with skin, eyes and clothing.

Wash hands before breaks and immediately after handling the

product.

Remove respiratory and skin/eye protection only after vapors

have been cleared from the area.

Remove contaminated clothing and protective equipment

before entering eating areas. Wash thoroughly after handling.

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## 9. Physical and chemical properties

Appearance paste Color various

Odor mild

musty

Odor Threshold No data available

Flash point 185 °F (85 °C)

No data available Ignition temperature

Decomposition temperature No data available

Lower explosion limit (Vol%) No data available

Upper explosion limit (Vol%) No data available

No data available Flammability (solid, gas)

Oxidizing properties No data available

рΗ Note: Not applicable

Melting point/range /

Freezing point

Boiling point/boiling range

No data available

Vapor pressure 0.01 mmHg (0.01 hpa)

ca.1.12 g/cm3 Density

at 73 °F (23 °C)

No data available

Water solubility Note: insoluble

Partition coefficient: n-

octanol/water

Viscosity, dynamic

No data available

No data available

Viscosity, kinematic > 20.5 mm2/s

at 104 °F (40 °C)

Relative vapor density No data available

No data available Evaporation rate

No data available Burning rate

Volatile organic compounds

(VOC) content

: 37 g/l



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## 10. Stability and reactivity

Reactivity : No dangerous reaction known under conditions of normal use.

Chemical stability : The product is chemically stable.

Possibility of hazardous

reactions

: Stable under recommended storage conditions.

Conditions to avoid : Extremes of temperature and direct sunlight.

Incompatible materials : No data available

#### 11. Toxicological information

## **Acute toxicity**

Not classified based on available information.

## **Ingredients:**

**N-(2-aminoethyl)-N'-[3-(trimethoxysilyl)propyl]ethylenediamine:**Acute oral toxicity : LD50 Oral (Rat): 7,758 mg/kg

Acute dermal toxicity : LD50 Dermal (Rat): 16,640 mg/kg

octamethylcyclotetrasiloxane:

Acute inhalation toxicity : LC50 (Rat): 36 mg/l

Exposure time: 4 h
Test atmosphere: vapor

#### Skin corrosion/irritation

Not classified based on available information.

## Serious eye damage/eye irritation

Causes serious eye irritation.

#### Respiratory or skin sensitization

Skin sensitization: May cause an allergic skin reaction.

Respiratory sensitization: Not classified based on available information.

#### Germ cell mutagenicity

Not classified based on available information.

#### Reproductive toxicity

Suspected of damaging fertility.

# STOT-single exposure

Not classified based on available information.

#### STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure if swallowed. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

## **Aspiration toxicity**

Not classified based on available information.



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Carcinogenicity

Not classified based on available information.

IARC Group 2B: Possibly carcinogenic to humans

titanium dioxide 13463-67-7 Carbon black 1333-86-4

NTP Not applicable

Carbon black (1333-86-4)

**Animal Toxicity:** 

Rat, oral, duration 2 year

Effect: no tumors

Mouse, oral, duration 2 years

Effect: no tumors

Mouse, dermal, duration 18 months

Effect: no skin tumors

Rat, inhalation, duration 2 years

Target organ: lungs

Effect: inflammation, fibrosis, tumors

Note: Tumors in the rat lung are considered to be related to the "particle overload phenomenon" rather than to a specific chemical effect of carbon black itself in the lung. These effects in rats have been reported in many studies on other poorly soluble inorganic particles and appear to be rat specific. Tumors have not been observed in other species (i.e., mouse and hamster) for carbon black or other poorly soluble particles under similar circumstances and study conditions.

Mortality studies (human data): A study on carbon black production workers in the UK (Sorahan, 2001) found an increased risk of lung cancer in two of the five plant studied; however, the increase was not related to the dose of carbon black. Thus, the authors did not consider the increased risk in lung cancer to be due to carbon black exposure. A German study of carbon black workers at one plant (Morfeld, 2006; Buechte, 2006) found a similar increase in lung cancer risk but, like the Sorohan, 2001 (UK study) found no association with carbon black exposure. A large US study of 18 plants showed a reduction in lung cancer risk in carbon black production workers (DEII, 2006). Based upon these studies, the February 2006 Working Group at the International Agency for Research on Cancer (IARC) concluded that the human evidence for carcinogenicity was inadequate (IARC, 2010).

Since the IARC evaluation of carbon black, Sorahan and Harrington (2007) have re-analyzed the UK study data using an alternative exposure hypothesis and found a positive association with carbon black exposure in two of the five plants. The same exposure hypothesis was applied by Morfeld and McCunney (2009) to the German cohort; in contrast, they found no association between carbon black exposure and lung cancer risk and, thus, no support for the alternative exposure hypothesis used by Sorahan and Harrington.

Overall, as a result of these detailed investigations, no causative link between carbon black exposure and cancer risk in humans has been demonstrated.

IARC CANCER CLASSIFICATION: In 2006 IARC re-affirmed its 1995 finding that there is "inadequate evidence" from human health studies to assess whether carbon black causes cancer in humans. IARC concluded that there is "sufficient evidence" in experimental animal studies for the carcinogenicity of carbon black. IARC's overall evaluation is that carbon black is "possibly carcinogenic to humans" (Group 2B)". This conclusion was based on IARC's



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guidelines, which generally require such a classification if one species exhibits carcinogenicity in two or more animal studies (IARC, 2010).

Solvent extracts of carbon black were used in one study of rats in which skin tumors were found after dermal application and several studies of mice in which sarcomas were found following subcutaneous injection. IARC concluded that there was "sufficient evidence" that carbon black extracts can cause cancer in animals (Group 2B).

**ICGIH CANCER CLASSIFICATION:** Confirmed Animal Carcinogen with Unknown Relevance to Humans (Category A3 Carcinogen).

ASSESSMENT: Applying the guidelines of self-classification under the Globally Harmonized System of Classification and Labeling of Chemicals, carbon black is not classified as a carcinogen. Lung tumors are induced in rats as a result of repeated exposure to inert, poorly soluble particles like carbon black and other poorly soluble particles. Rats tumors are a result of a secondary non-genotoxic mechanism that has questionable relevance for classification in humans. In support of this opinion, the CLP Guidance for Specific Target Organ Toxicity - Repeated Exposure (STOT-RE), cites lung overload under mechanisms not relevant to humans. Human health studies show that exposure to carbon black does not increase the risk to carcinogenicity.

#### Titanium dioxide (13463-67-7)

In lifetime inhalation studies of rats, airborne respirable-size titanium dioxide particles have seen shown to cause an increase in lung tumors at concentrations associated with substantial particle lung burdens and consequential pulmonary overload and inflammation. The potential for these adverse health effects appears to be closely related to the particle size and the amount of the exposed surface area that comes into contact with the lung. However, tests with other laboratory aninals such as mice and hamsters, indicate that rats are significantly more susceptible to the pulmonary overload and inflammation that cause lung cancer. Epidemiology studies do no suggest an increased risk of cancer in humans from occupational exposure to titanium dioxide. Titanium dioxide has been characterized by IARC as possibly carcinogenic to humans (Group 2B) through inhalation (not ingestion). It has not been characterized as a potential carcinogen by either NTP or OSHA.

### 12. Ecological information

Other information Do not empty into drains; dispose of this material and its

container in a safe way.

Avoid dispersal of spilled material and runoff and contact

with soil, waterways, drains and sewers.

## 13. Disposal considerations

## **Disposal methods**

Waste from residues

: Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional



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local authority requirements.

Contaminated packaging : Empty containers should be taken to an approved waste

handling site for recycling or disposal.

## 14. Transport information

DOT

Not dangerous goods

IATA

Not dangerous goods

**IMDG** 

Not dangerous goods

## Special precautions for user

No data available

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

#### 15. Regulatory information

TSCA list : All chemical substances in this product are either listed on the

TSCA Inventory or are in compliance with a TSCA Inventory

exemption.

## **EPCRA - Emergency Planning and Community Right-to-Know**

## **CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

#### **SARA304 Reportable Quantity**

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Fire Hazard

Acute Health Hazard Chronic Health Hazard

SARA 302 : No chemicals in this material are subject to the reporting

requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with

known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act



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Ozone-Depletion Potential

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CER 82 Subst A App A + R)

Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

California Prop 65

WARNING! This product contains a chemical known in the

State of California to cause cancer.

WARNING: This product contains a chemical known in the State of California to cause birth defects or other reproductive

harm.

#### 16. Other information

#### **HMIS Classification**



**Caution:** HMIS® rating is based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® rating is not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® rating is to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). Please note HMIS® attempts to convey full health warning information to all employees.

## **Notes to Reader**

The information contained in this Safety Data Sheet applies only to the actual Sika Corporation ("Sika") product identified and described herein. This information is not intended to address, nor does it address the use or application of the identified Sika product in combination with any other material, product or process. All of the information set forth herein is based on technical data regarding the identified product that Sika believes to be reliable as of the date hereof. Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's current Product Data Sheet, product label and Safety Data Sheet for each Sika product, which are available at web site and/or telephone number listed in Section 1 of this SDS.

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