



**1. Identification**

Product name : Sikaflex® TS Plus

Supplier : Sika Corporation  
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Lyndhurst, NJ 07071  
USA  
www.sikausa.com

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E-mail address : ehs@sika-corp.com

Emergency telephone : CHEMTREC: 800-424-9300  
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**

|  |  |
|--|--|
| Respiratory sensitization, Category 1  | H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| Skin sensitization, Category 1   | H317: May cause an allergic skin reaction.                                       |
| Carcinogenicity, Category 1A (Inhalation)                                      | H350i: May cause cancer by inhalation.   |
| Specific target organ systemic toxicity - repeated exposure, Category 1, Lungs | H372: Causes damage to organs through prolonged or repeated exposure.            |

**GHS label elements**

Hazard pictograms : 

Signal Word : Danger

Hazard Statements : H317 May cause an allergic skin reaction.  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H350i May cause cancer by inhalation.  
H372 Causes damage to organs (Lungs) through prolonged or repeated exposure.

Precautionary Statements : **Prevention:**  
P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read



and understood.  
 P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.  
 P264 Wash skin thoroughly after handling.  
 P270 Do not eat, drink or smoke when using this product.  
 P272 Contaminated work clothing must not be allowed out of the workplace.  
 P280 Wear protective gloves.  
 P281 Use personal protective equipment as required.  
 P285 In case of inadequate ventilation wear respiratory protection.

**Response:**

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  
 P304 + P341 IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.  
 P308 + P313 IF exposed or concerned: Get medical advice/ attention.  
 P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.  
 P363 Wash contaminated clothing before reuse.

**Storage:**

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  $\geq 1\%$ .

**3. Composition/information on ingredients**

**Hazardous ingredients**

| Chemical name                                | CAS-No.    | Concentration (%)  |
|--|------------|--------------------|
| Quartz (SiO <sub>2</sub> ) <5µm              | 14808-60-7 | $\geq 1 - < 2\%$   |
| naphtha (petroleum), hydrodesulfurized heavy | 64742-82-1 | $< 1\%$            |
| 4,4'-methylenediphenyl diisocyanate          | 101-68-8   | $\geq 0.1 - < 1\%$ |

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.

**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.



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- |   |   |   |
|---|---|---|
| In case of eye contact                                      | : | Remove contact lenses.<br>Keep eye wide open while rinsing.<br>If eye irritation persists, consult a specialist.  |
| If swallowed  | : | Clean mouth with water and drink afterwards plenty of water.<br>Do not induce vomiting without medical advice.<br>Do not give milk or alcoholic beverages.<br>Never give anything by mouth to an unconscious person.<br>Obtain medical attention.   |
| Most important symptoms and effects, both acute and delayed | : | Asthmatic appearance<br>Allergic reactions<br>See Section 11 for more detailed information on health effects and symptoms.<br><br>sensitizing effects<br>carcinogenic effects<br><br>May cause an allergic skin reaction.<br>May cause allergy or asthma symptoms or breathing difficulties if inhaled.<br>May cause cancer by inhalation.<br>Causes damage to organs through prolonged or repeated exposure. |
| Protection of first-aiders                                  | : | Move out of dangerous area.<br>Consult a physician.<br>Show this material safety data sheet to the doctor in attendance.  |
| Notes to physician  | : | Treat symptomatically.  |

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**5. Fire-fighting measures**

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|--|---|---|
| Suitable extinguishing media                   | : | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.   |
| Specific extinguishing methods                 | : | Collect contaminated fire extinguishing water separately. This must not be discharged into drains.<br>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 | : | Use personal protective equipment.<br>Deny access to unprotected persons.  |
| Environmental precautions   | : | Do not flush into surface water or sanitary sewer system.<br>If the product contaminates rivers and lakes or drains inform respective authorities.<br>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 : 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 : Prevent unauthorized access.  
Store in original container.  
Keep container tightly closed in a dry and 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 |
|----------------------|------------|----------|-------|---------------------------------------|
| Quartz (SiO2) <5µm   | 14808-60-7 | OSHA Z-3 | TWA   | 10 mg/m3 / %SiO2+2 respirable         |
|                      |            | OSHA Z-3 | TWA   | 250 mppcf / %SiO2+5 respirable        |
|                      |            | OSHA P0  | TWA   | 0.1 mg/m3 Respirable fraction         |
|                      |            | ACGIH    | TWA   | 0.025 mg/m3 Respirable fraction       |
|                      |            | OSHA Z-1 | TWA   | 0.05 mg/m3 Respirable dust            |
| naphtha (petroleum), | 64742-82-1 | OSHA Z-1 | TWA   | 500 ppm                               |



|                                     |          |          |     |                        |
|-------------------------------------|----------|----------|-----|------------------------|
| hydrodesulfurized heavy             |          |          |     | 2,000 mg/m3            |
|                                     |          | OSHA P0  | TWA | 400 ppm<br>1,600 mg/m3 |
| 4,4'-methylenediphenyl diisocyanate | 101-68-8 | ACGIH    | TWA | 0.005 ppm              |
|                                     |          | OSHA Z-1 | C   | 0.02 ppm<br>0.2 mg/m3  |
|                                     |          | OSHA P0  | C   | 0.02 ppm<br>0.2 mg/m3  |

\*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 P0. 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.

**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 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 : characteristic  
Odor Threshold : No data available  
Flash point : > 214 °F (101 °C)  
Ignition temperature : No data available  
Decomposition temperature : No data available  
Lower explosion limit (Vol%) : No data available  
Upper explosion limit (Vol%) : No data available  
Flammability (solid, gas) : No data available  
Oxidizing properties : No data available  
pH : No data available  
Melting point/range / Freezing point : No data available  
Boiling point/boiling range : No data available  
Vapor pressure : 0.01 mmHg (0.01 hpa)  
Density : ca.1.25 g/cm<sup>3</sup>  
at 68 °F (20 °C)  
Water solubility : Note: insoluble  
Partition coefficient: n-octanol/water : No data available  
Viscosity, dynamic : ca.90,000 mPa.s  
at 68 °F (20 °C)  
Viscosity, kinematic : > 20.5 mm<sup>2</sup>/s  
at 104 °F (40 °C)  
Relative vapor density : No data available



Evaporation rate : No data available  
Burning rate : No data available  
Volatile organic compounds (VOC) content : 35 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 : No data available  
Incompatible materials : No data available

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**11. Toxicological information**

**Acute toxicity**

Not classified based on available information.

**Ingredients:**

**4,4'-methylenediphenyl diisocyanate:**

Acute inhalation toxicity : Acute toxicity estimate: 1.5 mg/l  
Test atmosphere: dust/mist  
Method: Expert judgment

**Skin corrosion/irritation**

Not classified based on available information.

**Serious eye damage/eye irritation**

Not classified based on available information.

**Respiratory or skin sensitization**

Skin sensitization: May cause an allergic skin reaction.  
Respiratory sensitization: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Germ cell mutagenicity**

Not classified based on available information.

**Reproductive toxicity**

Not classified based on available information.

**STOT-single exposure**

Not classified based on available information.

**STOT-repeated exposure**

Causes damage to organs (Lungs) through prolonged or repeated exposure.  
Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low



levels.

**Aspiration toxicity**

Not classified based on available information.

**Carcinogenicity**

May cause cancer by inhalation.

**IARC** Group 2B: Possibly carcinogenic to humans

titanium dioxide 13463-67-7  
naphtha (petroleum), 64742-82-1  
hydrodesulfurized heavy  
Group 1: Carcinogenic to humans

**NTP**

Quartz (SiO2) <5µm 14808-60-7  
Known to be human carcinogen

Quartz (SiO2) <5µm 14808-60-7

Titanium dioxide (13463-67-7)

In lifetime inhalation studies of rats, airborne respirable-size titanium dioxide particles have been 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 animals 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 not 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 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** : Chronic Health Hazard  
Respiratory or skin sensitization  
Carcinogenicity  
Specific target organ toxicity (single or repeated exposure)

**SARA 302** : This material does not contain any components with a section 302 EHS TPQ.

**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**

**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 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:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

16. Other information

HMIS Classification

|                     |   |   |
|---------------------|---|---|
| Health              | * | 3 |
| Flammability        |   | 1 |
| Physical Hazard     |   | 0 |
| Personal Protection |   | X |

**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

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