



**1. Identification**

Product name : Sikaflex®-2c NS TG

Supplier : Sika Corporation  
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USA  
www.sikausa.com

Telephone : (201) 933-8800

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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**

|   |  |
|---|--|
| Flammable liquids, Category 3   | H226: Flammable liquid and vapor.  |
| Skin irritation, Category 2   | H315: Causes skin irritation.  |
| Eye irritation, Category 2A   | H319: Causes serious eye irritation.   |
| 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 2 (Inhalation)  | H351: Suspected of causing cancer if inhaled.                                    |
| Specific target organ systemic toxicity - single exposure, Category 3, Respiratory system | H335: May cause respiratory irritation.  |

**GHS label elements**

Hazard pictograms :

Signal Word : Danger

Hazard Statements : H226 Flammable liquid and vapor.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.



H335 May cause respiratory irritation.  
H351 Suspected of causing cancer if inhaled.

Precautionary Statements

: **Prevention:**  
P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.  
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
P233 Keep container tightly closed.  
P240 Ground/bond container and receiving equipment.  
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.  
P242 Use only non-sparking tools.  
P243 Take precautionary measures against static discharge.  
P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.  
P264 Wash skin thoroughly after handling.  
P271 Use only outdoors or in a well-ventilated area.  
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.  
P285 In case of inadequate ventilation wear respiratory protection.  
**Response:**  
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
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.  
P362 Take off contaminated clothing and wash before reuse.  
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.  
**Storage:**  
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
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.

Warning

: Reports have associated repeated and prolonged exposure to some of the chemicals in this product with permanent brain, liver, kidney and nervous system damage. Intentional misuse by deliberate concentration and inhalation of vapors may be harmful or fatal.



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 (%)   |
|---|------------|---------------------|
| Isophorondiisocyanate homopolymer                       | 53880-05-0 | $\geq 50 - < 100\%$ |
| 2-methoxy-1-methylethyl acetate                         | 108-65-6   | $\geq 10 - < 20\%$  |
| xylene  | 1330-20-7  | $\geq 10 - < 20\%$  |
| ethylbenzene  | 100-41-4   | $\geq 2 - < 5\%$    |
| 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate | 4098-71-9  | $\geq 0.1 - < 1\%$  |

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.
- 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  
  
Asthmatic appearance  
Cough  
Respiratory disorder  
Allergic reactions  
Excessive lachrymation  
Erythema  
Dermatitis  
See Section 11 for more detailed information on health effects



and symptoms.

Causes skin irritation.  
May cause an allergic skin reaction.  
Causes serious eye irritation.  
May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
May cause respiratory irritation.  
Suspected of causing cancer if inhaled.

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.

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**5. Fire-fighting measures**

- Suitable extinguishing media : Alcohol-resistant foam  
Carbon dioxide (CO2)  
Dry chemical
- Unsuitable extinguishing media : Water  
High volume water jet
- Specific hazards during fire fighting : Do not use a solid water stream as it may scatter and spread fire.
- Specific extinguishing methods : Use water spray to cool unopened containers.  
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 : Use personal protective equipment.  
Remove all sources of ignition.  
Deny access to unprotected persons.  
Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.
- Environmental precautions : Prevent product from entering drains.  
If the product contaminates rivers and lakes or drains inform respective authorities.  
Local authorities should be advised if significant spillages cannot be contained.
- Methods and materials for : Contain spillage, and then collect with non-combustible



containment and cleaning up      absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

**7. Handling and storage**

Advice on safe handling            : Avoid formation of aerosol.  
 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.  
 Take precautionary measures against static discharge.  
 Open drum carefully as content may be under pressure.  
 Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors).  
 Follow standard hygiene measures when handling chemical products.

Conditions for safe storage        : Store in original container.  
 Keep in a well-ventilated place.  
 Containers which are opened must be carefully resealed and kept upright to prevent leakage.  
 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 |
|--------------|-----------|----------|-------|---------------------------------------|
| xylene       | 1330-20-7 | OSHA Z-1 | TWA   | 100 ppm<br>435 mg/m3                  |
|              |           | OSHA P0  | STEL  | 150 ppm<br>655 mg/m3                  |
|              |           | OSHA P0  | TWA   | 100 ppm<br>435 mg/m3                  |
|              |           | ACGIH    | TWA   | 100 ppm                               |
|              |           | ACGIH    | STEL  | 150 ppm                               |
| ethylbenzene | 100-41-4  | ACGIH    | TWA   | 20 ppm                                |



|   |           |          |      |                      |
|---|-----------|----------|------|----------------------|
|   |           | ACGIH    | STEL | 125 ppm              |
|   |           | OSHA Z-1 | TWA  | 100 ppm<br>435 mg/m3 |
|   |           | OSHA P0  | TWA  | 100 ppm<br>435 mg/m3 |
|   |           | OSHA P0  | STEL | 125 ppm<br>545 mg/m3 |
| 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate | 4098-71-9 | ACGIH    | TWA  | 0.005 ppm            |
|   |           | OSHA P0  | TWA  | 0.005 ppm            |
|   |           | OSHA P0  | STEL | 0.02 ppm             |

\*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.  
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 : liquid
- Color : light yellow
- Odor : solvent
- Odor Threshold : No data available
- Flash point : 104 °F (40 °C)
- Autoignition temperature : 599 °F (315 °C)
- Decomposition temperature : No data available
- Lower explosion limit : 13 %(V)
- Upper explosion limit : 0.8 %(V)
- 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 : 284 °F (140 °C)
- Vapor pressure : 6.000 mmHg (7.9993 hpa)
- Density : 1.08 g/cm3



at 68 °F (20 °C)

|  |   |   |
|--|---|---|
| Water solubility                         | : | Note: insoluble   |
| Partition coefficient: n-octanol/water   | : | No data available   |
| Viscosity, dynamic                       | : | No data available   |
| Viscosity, kinematic                     | : | > 20.5 mm <sup>2</sup> /s<br>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 | : | 66 g/l Sikaflex®-2c NS EZ Mix Part (A + B) + Sikaflex®-2c NS TG Combined                                  |
|  | : | 66 g/l Sikaflex®-2c NS EZ Mix Part (A + B) + Sikaflex®-2c NS TG + Sikaflex®-2c NS EZ Mix Booster Combined |

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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.<br>Vapors may form explosive mixture with air. |
| Conditions to avoid                | : | Heat, flames and sparks.  |
| Incompatible materials             | : | No data available   |

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**11. Toxicological information**

**Acute toxicity**

Not classified based on available information.

**Ingredients:**

**2-methoxy-1-methylethyl acetate:**

Acute oral toxicity : LD50 Oral (Rat): > 5,000 mg/kg

Acute dermal toxicity : LD50 Dermal (Rabbit): > 5,000 mg/kg

**xylene:**

Acute oral toxicity : LD50 Oral (Rat): 3,523 mg/kg

Acute dermal toxicity : LD50 Dermal (Rabbit): 1,700 mg/kg





**ethylbenzene:**

Acute oral toxicity : LD50 Oral (Rat): 3,500 mg/kg

Acute dermal toxicity : LD50 Dermal (Rabbit): 5,510 mg/kg

**3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate:**

Acute oral toxicity : LD50 Oral (Rat): 4,814 mg/kg

Acute inhalation toxicity : LC50 (Rat): 0.031 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 Dermal (Rat): > 7,000 mg/kg

**Skin corrosion/irritation**

Causes skin irritation.

**Serious eye damage/eye irritation**

Causes serious eye irritation.

**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**

May cause respiratory irritation.

**STOT-repeated exposure**

Reports have associated repeated and prolonged exposure to some of the chemicals in this product with permanent brain, liver, kidney and nervous system damage. Intentional misuse by deliberate concentration and inhalation of vapors may be harmful or fatal.

Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

**Aspiration toxicity**

Not classified based on available information.

**Carcinogenicity**

Suspected of causing cancer if inhaled.

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

**NTP** ethylbenzene 100-41-4  
Not applicable

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**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.

**Component:**

|        |           |   |
|--------|-----------|---|
| xylene | 1330-20-7 | <u>Toxicity to fish:</u><br>Species: Oncorhynchus mykiss (rainbow trout)<br>Dose: 3.3 mg/l<br>Exposure time: 96 h |
|--------|-----------|---|

**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**

|                          |                |
|--------------------------|----------------|
| UN number                | 1866           |
| Description of the goods | Resin solution |
| Class                    | 3              |
| Packing group            | III            |
| Labels                   | 3              |
| Emergency Response       | 127            |
| Guidebook Number         |                |

**IATA**

|  |                |
|--|----------------|
| UN number                                | 1866           |
| Description of the goods                 | Resin solution |
| Class                                    | 3              |
| Packing group                            | III            |
| Labels                                   | 3              |
| Packing instruction (cargo aircraft)     | 366            |
| Packing instruction (passenger aircraft) | 355            |
| Packing instruction (passenger aircraft) | Y344           |

**IMDG**

|                          |                |
|--------------------------|----------------|
| UN number                | 1866           |
| Description of the goods | RESIN SOLUTION |
| Class                    | 3              |



Packing group III  
Labels 3  
EmS Number 1 F-E  
EmS Number 2 S-E

Marine pollutant no

DOT: As per 49CFR 173.150 (f) Combustible Liquid Exception, Material is Not Regulated.  
IMDG: For Limited Quantity special provisions reference IMDG Code Chapter 3.4

**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** : Flammable (gases, aerosols, liquids, or solids)  
Chronic Health Hazard  
Skin corrosion or irritation  
Serious eye damage or eye irritation  
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** : The following components are subject to reporting levels established by SARA Title III, Section 313:

|              |           |         |
|--------------|-----------|---------|
| xylene       | 1330-20-7 | 12.00 % |
| ethylbenzene | 100-41-4  | 3.00 %  |

**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).

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

|              |           |         |
|--------------|-----------|---------|
| xylene       | 1330-20-7 | 12.00 % |
| ethylbenzene | 100-41-4  | 3.00 %  |

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 – [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

**16. Other information**

**HMIS Classification**

|                            |   |          |
|----------------------------|---|----------|
| <b>Health</b>              | * | <b>3</b> |
| <b>Flammability</b>        |   | <b>2</b> |
| <b>Physical Hazard</b>     |   | <b>0</b> |
| <b>Personal Protection</b> |   | <b>X</b> |

**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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Safety Data Sheet

**Sikaflex®-2c NS TG**



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