SikaGlaze® IG 4429 HM Part B

Revision Date 01/10/2014

1. Identification

| Product name | : | SikaGlaze® IG 4429 HM Part B |
|---|---|--|
| Supplier | : | Sika Corporation |
| Address | : | 201 Polito Avenue Lyndhurst, NJ 07071 USA www.sikausa.com |
| Telephone | : | (201) 933-8800 |
| Telefax | : | (201) 804-1076 |
| Emergency telephone | : | CHEMTREC: 800-424-9300 INTERNATIONAL: 703-527-3887 ehs@sika-corp.com |
| Recommended use of the chemical and restrictions on use | : | For further information, refer to the product technical data sheet. |

2. Hazards identification

GHS Classification

Skin irritation , Category 2 Serious eye damage , Category 1 Respiratory sensitization , Category 1

Skin sensitization , Category 1 Carcinogenicity , Category 2 Specific target organ systemic toxicity single exposure , Category 3, Respiratory system Specific target organ systemic toxicity repeated exposure , Category 2 (Inhalation) H315: Causes skin irritation.
H318: Causes serious eye damage.
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317: May cause an allergic skin reaction.
H351: Suspected of causing cancer.
H335: May cause respiratory irritation.

H373: May cause damage to organs through prolonged or repeated exposure if inhaled.

GHS Label element

| Hazard pictograms | |
|-------------------|---|
| Signal Word | : Danger |
| Hazard Statements | H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335 May cause respiratory irritation. |



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| | H351 Suspected of causing cancer. H373 May cause damage to organs through prolonged or repeated exposure if inhaled. |
|----------------------------|--|
| 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. P271 Use only outdoors or in a well-ventilated area. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear eye protection/ face protection. P280 Wear eye 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 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position 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. P362 Take off contaminated clothing and wash before reuse. Storage: P403 + P233 Store in a well-ventilated place. Keep container tightly closed. 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.

3. Composition/information on ingredients

Hazardous ingredients

| Chemical Name | CAS-No. | Concentration (%) |
|--|------------|-------------------|
| 4,4'-methylenediphenyl diisocyanate | 101-68-8 | >= 10 - < 20 % |
| methylenediphenyl diisocyanate | 26447-40-5 | >= 10 - < 20 % |
| Methylenediphenyl diisocyanate, | 39310-05-9 | >= 10 - < 20 % |
| homopolymerisate | | |
| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane | 2530-83-8 | >= 5 - < 10 % |
| Carbon black | 1333-86-4 | >= 2 - < 5 % |



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.

| 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 | Small amounts splashed into eyes can cause irreversible tissue damage and blindness. In the case of contact with eyes, rinse immediately with plent of water and seek medical advice. Continue rinsing eyes during transport to hospital. Remove contact lenses. Keep eye wide open while rinsing. |
| If swallowed | Clean mouth with water and drink afterwards plenty of water. Induce vomiting immediately and call a physician. Do NOT induce vomiting. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. |
| 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 effect and symptoms. |
| 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. |
| Fire-fighting measures | |
| 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. |
|----------------------------------|--|
| | |



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Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special protective equipment : In the event of fire, wear self-contained breathing apparatus. for fire-fighters

6. Accidental release measures

| Personal precautions, | : | Use personal protective equipment. |
|--|---|---|
| protective equipment and emergency procedures | | Deny access to unprotected persons. |
| Environmental precautions | | Do not flush into surface water or sanitary sewer system. 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 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 | 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 |
|-------------------------------------|----------|----------|-------|--|
| 4,4'-methylenediphenyl diisocyanate | 101-68-8 | ACGIH | TWA | 0.005 ppm |
| | | OSHA Z-1 | С | 0.02 ppm 0.2 mg/m3 |
| | | OSHA P0 | С | 0.02 ppm |



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|------------------------|-----------|----------|-----|-----------------------|
| | | | | 0.2 mg/m3 |
| Carbon black | 1333-86-4 | ACGIH | TWA | 3.5 mg/m3 |
| | | OSHA Z-1 | TWA | 3.5 mg/m3 |
| | | OSHA P0 | TWA | 3.5 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.

**<u>Basis</u>

| 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 equipmen | | |
| Respiratory protection | a properly fitted NIOSH approver irator complying with an approve essment indicates this is necessa | d standard if a risk |
| | filter class for the respirator must imum expected contaminant con- /vapor/aerosol/particulates) that is product. If this concentration is ex- thing apparatus must be used. | centration may arise when handling |
| Hand protection Remarks | mical-resistant, impervious glove oved standard should be worn at nical products if a risk assessme essary. | all times when handling |
| Eye protection | ty eyewear complying with an ap sed when a risk assessment indi | |
| Skin and body protection | ose body protection in relation to centration and amount of dangero specific work-place. | |
| Hygiene measures | d contact with skin, eyes and clo h hands before breaks and imme luct. hove contaminated clothing and p re entering eating areas. | ediately after handling the |



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Wash thoroughly after handling.

9. Physical and chemical properties

| Appearance Color | : | paste black |
|---|---|------------------------------------|
| Odor | : | characteristic |
| Odor Threshold | : | no data available |
| Flash point | : | > 199.9 °F (> 93.3 °C) |
| Ignition temperature | : | not applicable |
| 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 |
| Autoignition temperature | : | no data available |
| рН | : | Note: not applicable |
| Melting point/range / | : | no data available |
| Freezing point Boiling point/boiling range | : | no data available |
| Vapor pressure | : | no data available |
| Density | : | ca.1.13 g/cm3 at 73 °F (23 °C) |
| Water solubility | : | Note: insoluble |
| Partition coefficient: n- | : | no data available |
| octanol/water Viscosity, dynamic | : | no data available |
| Viscosity, kinematic | : | > 20.5 mm2/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 | : | < 5 g/l A+B Combined |



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 |

11. Toxicological information

Acute toxicity

|--|

| Acute oral toxicity | : no data available |
|---------------------------|---------------------|
| Acute inhalation toxicity | : no data available |
| Acute dermal toxicity | : no data available |

Ingredients:

| 4,4'-meth | ylenediphenyl | diisocyanate : |
|-----------|---------------|----------------|
| ., | , | anooyanator |

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

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane :

| Acute oral toxicity | : | LD50 Oral rat: 7,010 mg/kg |
|---------------------------|---|--|
| Acute inhalation toxicity | : | LC50 rat: > 5.3 mg/l Exposure time: 4 h |
| Acute dermal toxicity | : | LD50 Dermal rabbit: 4,248 mg/kg |
| Carbon black : | | |

Acute oral toxicity

: LD50 Oral rat: > 8,000 mg/kg

Skin corrosion/irritation

Product

Causes skin irritation.

Serious eye damage/eye irritation

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Product

Causes serious eye damage.

Respiratory or skin sensitization

Product

May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Germ cell mutagenicity

| Germ cell mutagenicity | | |
|---------------------------------|-------------------------------|--------------|
| Product | | |
| Mutagenicity | : no data available | |
| Carainaganiaity | | |
| Carcinogenicity | | |
| <u>Product</u> | | |
| Carcinogenicity | : Suspected of causing cance | er. |
| | | |
| IARC | Group 2B: Possibly carcinogen | ic to humans |
| | Carbon black | 1333-86-4 |
| NTP | not applicable | |
| Reproductive Toxicity/Fertility | | |
| <u>Product</u> | | |
| Reproductive toxicity | : no data available | |
| Reproductive Toxicity/Developm | ent/Teratogenicity | |
| <u>Product</u> | | |

STOT-single exposure

Teratogenicity

Product

Assessment: May cause respiratory irritation.

STOT-repeated exposure

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

: no data available

Product

Assessment: May cause damage to organs through prolonged or repeated exposure if inhaled.

Aspiration toxicity

Product

no data available

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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: | | |
| Carbon black | 1333-86-4 | <u>Toxicity to fish:</u> LC50 Species: Brachydanio rerio Dose: > 1,000 mg/l 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 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.

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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 | : Acute Health Hazard Chronic Health Hazard | | | | |
|--|---|--|--|--|--|
| SARA 302 | : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. | | | | |
| SARA 313 | The following components are subject to reporting levels established by SARA Title III, Section 313: 4,4'-methylenediphenyl 101-68-8 15.00 % diisocyanate | | | | |
| 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): | | | | | |
| | 4,4'-methylenediphenyl 101-68-8 15.00 % diisocyanate | | | | |
| 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 | Health | * |
|---------------------|------------------|-----|
| | Flammability | |
| | Physical Hazard | |
| | Personal Protect | ion |

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



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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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