

SAFETY DATA SHEET

SikaCure®-4950



Version
2.0

Revision Date:
14.05.2024

SDS Number (Internal):
100000051472

Date of last issue: 13.07.2023
Date of first issue: 13.07.2023

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : SikaCure®-4950

Recommended use of the chemical and restrictions on use

Product use : Adhesive

Manufacturer or supplier's details

Company : Sika Korea Ltd.
724, Anseongmatchum-daero
Miyang-myeon
Anseong-si
Gyeonggi-do
Korea

Telephone : +82-31-8056-7777

Emergency telephone number : +82-31-8056-7777

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

Telefax : +82-31-8056-7788

2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids : Category 2

Skin corrosion/irritation : Category 2

Serious eye damage/eye irritation : Category 2

Respiratory sensitisation : Category 1

Skin sensitisation : Category 1

Carcinogenicity : Category 2

Specific target organ toxicity - single exposure : Category 3 (Respiratory system, Central nervous system)

Specific target organ toxicity - repeated exposure : Category 2

GHS label elements

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Hazard pictograms

:



Signal word

:

Danger

Hazard statements

:

H225 Highly flammable liquid and vapour.
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.
H336 May cause drowsiness or dizziness.
H351 Suspected of causing cancer.
H373 May cause damage to organs 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.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P240 Ground and bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting equipment.
P242 Use non-sparking tools.
P243 Take action to prevent static discharges.
P260 Do not breathe mist or vapours.
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 protective gloves/ protective clothing/ eye protection/ face protection.
P284 Wear respiratory protection.

Response:

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
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.
P321 Specific treatment (see supplemental first aid instructions on this label).

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P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER/ doctor.
P362 + P364 Take off contaminated clothing and wash it 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 according to waste-related laws

Other hazards which do not result in classification

No data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	Common Name	CAS-No.	Concentration (% w/w)
ethyl acetate	ethyl acetate	141-78-6	>= 75 - < 80
Diphenylmethanediisocyanate, isomeres and homologues	Diphenylmethanediisocyanate, isomeres and homologues	9016-87-9	>= 15 - < 20
Isocyanic acid, polymethylenepolyphenylene ester, polymer with 2,2',2''-nitriлотris[ethanol]	Isocyanic acid, polymethylenepolyphenylene ester, polymer with 2,2',2''-nitriлотris[ethanol]	61909-68-0	>= 1 - < 5

4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Consult a physician.

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Show this safety data sheet to the doctor in attendance.

- 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.
- 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.
- If inhaled : Move to fresh air.
Consult a physician after significant exposure.
- If swallowed : Clean mouth with water and drink afterwards plenty of water.
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
sensitising effects
Asthmatic appearance
Cough
Respiratory disorder
Allergic reactions
Excessive lachrymation
Dermatitis
Loss of balance
Vertigo
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.
May cause drowsiness or dizziness.
Suspected of causing cancer.
May cause damage to organs through prolonged or repeated exposure.
- Notes to physician : Treat symptomatically.
-

5. FIREFIGHTING MEASURES

Suitable and unsuitable extinguishing media

- Suitable extinguishing media : Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry chemical
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- Unsuitable extinguishing media : Water
- Hazardous combustion products : No hazardous combustion products are known
- Specific extinguishing methods : Use water spray to cool unopened containers.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
-

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.
- Environmental precautions : Prevent product from entering drains.
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Contain spillage, and then collect with non-combustible 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 protection against fire and explosion : Use explosion-proof equipment.
Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.
Take precautionary measures against electrostatic discharges.
- Advice on safe handling : Avoid formation of aerosol.
Do not breathe vapours 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 sensitisation 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 vapours).
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Follow standard hygiene measures when handling chemical products

Conditions for safe storage : Store in original container.
Store in cool place.
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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
ethyl acetate	141-78-6	TWA	400 ppm	KR OEL
Diphenylmethanediisocyanate, isomeres and homologues	9016-87-9	TWA	0.005 ppm	KR OEL
	Further information: Limited evidence of carcinogenicity in humans or animals, which is not sufficiently convincing to place the substance in Category 1			
		TWA	0.005 ppm	KR PEL
		TWA	0.005 ppm	ACGIH

Other ingredients, which are listed in section 3 but not listed in this section, do not have established occupational exposure limit values.

Personal protective equipment. Among the following personal protective equipment, the PPEs which require safety certification need to be certified by KOSHA.

Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-contained breathing apparatus must be used.

Eye protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary.

Hand protection : 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.

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.

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Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.
When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid
Colour : various
Odour : solvent-like
Odour Threshold : No data available
pH : No data available
Melting point/range / Freezing point : No data available
Boiling point/boiling range : No data available
Flash point : ca. -4 °C (25 °F)
(Method: closed cup)
Evaporation rate : No data available
Flammability (solid, gas) : No data available

Upper/lower flammability or explosive limits

Upper explosion limit / Upper flammability limit : 11.5 %(V)
Lower explosion limit / Lower flammability limit : 2.1 %(V)
Vapour pressure : 99.9915 hPa
Solubility(ies)
Water solubility : No data available
Solubility in other solvents : No data available
Density : ca. 1 g/cm³ (20 °C)
Partition coefficient: n-octanol/water : No data available
Auto-ignition temperature : 427 °C
Decomposition temperature : No data available

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Viscosity
Viscosity, dynamic : ca. 10 mPa.s (20 °C (68 °F))
Viscosity, kinematic : No data available
Explosive properties : No data available
Oxidizing properties : No data available

10. STABILITY AND REACTIVITY

Chemical stability and possibility of hazardous reactions : No dangerous reaction known under conditions of normal use. The product is chemically stable. Stable under recommended storage conditions. Vapours may form explosive mixture with air.
Conditions to avoid : Heat, flames and sparks.
Incompatible materials : No data available
Hazardous decomposition products : No hazardous decomposition products are known.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : No data available

Health hazard information

Acute toxicity

No data available

Components:

ethyl acetate:

Acute oral toxicity : LD50 Oral (Rat): > 5,000 mg/kg
Acute inhalation toxicity : LC50 (Rat): ca. 1,600 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Acute dermal toxicity : LD50 Dermal (Rabbit): > 5,000 mg/kg

Diphenylmethanediisocyanate, isomeres and homologues:

Acute oral toxicity : LD50 Oral (Rat): > 10,000 mg/kg
Acute inhalation toxicity : LC50: 1.5 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: Expert judgement
Assessment: The component/mixture is moderately toxic after

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short term inhalation.

Acute dermal toxicity : LD50 Dermal (Rabbit): > 9,400 mg/kg

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

Respiratory sensitisation

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin sensitisation

May cause an allergic skin reaction.

Carcinogenicity

Suspected of causing cancer.

Components:

ethyl acetate:

No data available

Diphenylmethanediisocyanate, isomeres and homologues:

No data available

Isocyanic acid, polymethylenepolyphenylene ester, polymer with 2,2',2''-nitrilotris[ethanol]:

Suspected of causing cancer.

Germ cell mutagenicity

No data available

Components:

ethyl acetate:

No data available

Diphenylmethanediisocyanate, isomeres and homologues:

No data available

Isocyanic acid, polymethylenepolyphenylene ester, polymer with 2,2',2''-nitrilotris[ethanol]:

No data available

Reproductive toxicity

No data available

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Components:

ethyl acetate:

No data available

Diphenylmethanediisocyanate, isomeres and homologues:

No data available

Isocyanic acid, polymethylenepolyphenylene ester, polymer with 2,2',2''-nitriлотris[ethanol]:

No data available

STOT - single exposure

May cause respiratory irritation.
May cause drowsiness or dizziness.

STOT - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Repeated dose toxicity

No data available

Aspiration toxicity

No data available

Experience with human exposure

No data available

Toxicology, Metabolism, Distribution

No data available

Neurological effects

No data available

Further information

No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Diphenylmethanediisocyanate, isomeres and homologues:

Toxicity to fish : LC50 (Brachydanio rerio (zebrafish)): > 1,000 mg/l
Exposure time: 96 h

Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): > 1,640 mg/l
Exposure time: 72 h

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Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

Product:

Additional ecological information : There is no data available for this product.

13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Send to a licensed waste management company.

Do not contaminate ponds, waterways or ditches with chemical or used container.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.

Do not re-use empty containers.
Do not burn, or use a cutting torch on, the empty drum.

Disposal precautions

Dispose of contents and container according to wastes control act.

14. TRANSPORT INFORMATION

International Regulations

UNRTDG

UN number : UN 1866
Proper shipping name : RESIN SOLUTION
Class : 3
Packing group : II
Labels : 3

IATA-DGR

UN/ID No. : UN 1866
Proper shipping name : Resin solution
Class : 3
Packing group : II
Labels : Flammable Liquids
Packing instruction (cargo aircraft) : 364
Packing instruction (passenger aircraft) : 353

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ger aircraft)

IMDG-Code

UN number : UN 1866
Proper shipping name : RESIN SOLUTION
Class : 3
Packing group : II
Labels : 3
EmS Code : F-E, S-E
Marine pollutant : no

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

Not applicable for product as supplied.

National Regulations

Refer to section 15 for specific national regulation.

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

15. REGULATORY INFORMATION

National regulatory information

Regulation under the Occupational Safety and Health Act

Harmful Substances Prohibited from Manufacturing

Not applicable

Harmful Substances Required Permission for Manufacture

Not applicable

Harmful Agents to be kept below Occupational Exposure Limits

Chemical name	CAS-No.
Ethyl acetate	141-78-6
Methylene bisphenyl isocyanate	9016-87-9

Harmful Agents Required to be kept below Permission Levels

Chemical name	CAS-No.
Methylene bis(phenyl isocyanate)	9016-87-9

Hazardous substances requiring management

Chemical name	CAS-No.	Threshold limits (%)
Ethyl acetate	141-78-6	>= 1 %
Methylene bis(phenyl isocyanate)	9016-87-9	>= 1 %

Special Management Materials

Not applicable

Controlled Substances Subject to Environment Monitoring

Chemical name	CAS-No.	Threshold limits (%)
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Ethyl acetate	141-78-6	>= 1 %
Methylene bis(phenyl isocyanate)	9016-87-9	>= 1 %

Controlled Substances Subject to Health Examination

Chemical name	CAS-No.	Threshold limits (%)
Methylene bis(phenyl isocyanate)	9016-87-9	>= 1 %

Hazardous Substances Subject to Process Safety Management (PSM) Reporting Obligation

Chemical name/Classification	Manufacturing or handling quantity	Storage quantity
Flammable liquids	5,000 kg	200,000 kg

Regulation under the Chemicals Control Act

Toxic Chemicals

Not applicable

Restricted Chemicals

Not applicable

Prohibited Chemicals

Not applicable

Toxic Release Inventory

Chemical name	CAS-No.	Group	Threshold limits (%)
Ethyl acetate	141-78-6	Group II	>= 1 %

Accident Precaution Chemicals

Chemical name	CAS-No.	Threshold limits	Designated quantity for manufacture or use	Designated quantity for storage
Ethyl acetate	141-78-6	>= 25 %	2 - 400 t	2 - 400 t

Dangerous Substances Safety Management Act

Classification : Group 4, Flammable liquids, Type 1 petroleums, Water insoluble liquid

Hazard rank : Hazardous rank II

Designated Quantity : 200 litre

Safety Warning : Keep away from fire

International Chemical Weapons Convention (CWC) : Not applicable
Schedules of Toxic Chemicals and Precursors

라. Wastes Control Act

Industrial general wastes
Follow article 13 of the act to dispose the product waste

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Other requirements in domestic and other countries

The components of this product are reported in the following inventories:

ENCS : On the inventory, or in compliance with the inventory

ISHL : Not in compliance with the inventory

KECI : Not in compliance with the inventory

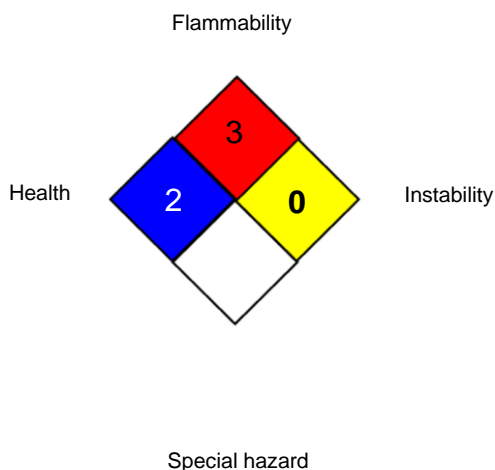
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NFPA:



Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
KR OEL : Harmful Agents to be kept below Occupational Exposure Limits
KR PEL : Harmful Agents Required to be kept below Permission Levels
ACGIH / TWA : 8-hour, time-weighted average
KR OEL / TWA : Time Weighted Average
KR PEL / TWA : TWA
ADR : European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS : Chemical Abstracts Service
DNEL : Derived no-effect level

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EC50	:	Half maximal effective concentration
GHS	:	Globally Harmonized System
IATA	:	International Air Transport Association
IMDG	:	International Maritime Code for Dangerous Goods
LD50	:	Median lethal dose (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)
LC50	:	Median lethal concentration (concentrations of the chemical in air that kills 50% of the test animals during the observation period)
MARPOL	:	International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978
OEL	:	Occupational Exposure Limit
PBT	:	Persistent, bioaccumulative and toxic
PNEC	:	Predicted no effect concentration
REACH	:	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency
SVHC	:	Substances of Very High Concern
vPvB	:	Very persistent and very bioaccumulative

The information contained in this Safety Data Sheet corresponds to our level of knowledge at the time of publication. All warranties are excluded. Our most current General Sales Conditions shall apply. Please consult the product data sheet prior to any use and processing.

KR / EN