



SAKRETE Construction Adhesive

SECTION 1. IDENTIFICATION

Product Identifier	SAKRETE Construction Adhesive
Other Means of Identification	SAKRETE Construction Adhesive
Product Family	KING Home Improvement Products
Recommended Use	SAKRETE Construction Adhesive is a one-component product designed for bonding a variety of materials together.
Manufacturer/Supplier Identifier	King Packaged Materials Company, 555 Michigan Drive, Suite 100, Oakville, Ontario, L6L 0G4, www.kpmindustries.com
Emergency Phone No.	King Packaged Materials Company, (800) 461-0566, 8:30am-4:30pm Chemtrec, (800) 424-9300, 24 hours/7 days a week
SDS No.	0491
Date of Preparation	January 20, 2020

SECTION 2. HAZARD IDENTIFICATION

Classification

Skin irritation - Category 2; Eye irritation - Category 2A; Respiratory sensitization - Category 1; Skin sensitization - Category 1; Carcinogenicity - Category 2; Specific target organ toxicity (repeated exposure) - Category 2

Label Elements



Signal Word:

Danger

Hazard Statement(s):

Causes skin irritation.

Causes serious eye irritation.

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

May cause an allergic skin reaction.

Suspected of causing cancer.

Causes damage to organs through prolonged or repeated exposure.

Precautionary Statement(s):

Prevention:

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not breathe dust/fume/gas/mist/vapours/spray.

In case of inadequate ventilation wear respiratory protection.

Wear protective gloves.

Wear eye protection/face protection.

Do not eat, drink or smoke when using this product.

Wash hands thoroughly after handling.

Product Identifier: SAKRETE Construction Adhesive - Ver. 1

SDS No.: 0491

Date of Preparation: January 20, 2020

Date of Last Revision: January 20, 2020

Page 01 of 07

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

Response:

IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

If exposed: Call a POISON CENTRE or doctor.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If eye irritation persists: Get medical advice/attention.

IF ON SKIN: Wash with plenty of water/

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

Take off contaminated clothing and wash it before reuse.

Get medical advice/attention if you feel unwell.

Storage:

Store locked up.

Disposal:

Dispose of contents and container in accordance with local, regional, national and international regulations.

Other Hazards

CONTAINS ISOCYANATES. INHALATION OF ISOCYANATE MISTS OR VAPOURS MAY CAUSE RESPIRATORY IRRITATION, BREATHLESSNESS, CHEST DISCOMFORT AND REDUCED PULMONARY FUNCTION. OVEREXPOSURE WELL ABOVE THE PEL MAY RESULT IN BRONCHITIS, BRONCHIAL SPASMS AND PULMONARY EDEMA. LONG-TERM EXPOSURE TO ISOCYANATES HAS BEEN REPORTED TO CAUSE LUNG DAMAGE, INCLUDING REDUCED LUNG FUNCTION WHICH MAY BE PERMANENT. ACUTE OR CHRONIC OVEREXPOSURE TO ISOCYANATES MAY CAUSE SENSITIZATION IN SOME INDIVIDUALS, RESULTING IN ALLERGIC RESPIRATORY REACTIONS INCLUDING WHEEZING, SHORTNESS OF BREATH AND DIFFICULTY BREATHING. ANIMAL TESTS INDICATE THAT SKIN CONTACT MAY PLAY A ROLE IN CAUSING RESPIRATORY SENSITIZATION.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%	Other Identifiers	Other Names
Talc	14807-96-6	25-50%	Not applicable	
4,4'-Methylenediphenyl diisocyanate	101-68-8	10-15%	Not applicable	
Distillates (petroleum), hydrotreated middle	64742-46-7	7-10%	Not applicable	
Methylenediphenyl diisocyanate (mixed isomers)	26447-40-5	3-5%	Not applicable	
Polymethylene polyphenyl isocyanate	9016-87-9	1-3%	Not applicable	

Notes

The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Move to fresh air. Immediately obtain medical attention.

Skin Contact

Immediately wash with water and soap and rinse thoroughly. Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Thoroughly clean clothing, shoes and leather goods before reuse or dispose of safely. If skin irritation or a rash occurs, get medical advice or attention. Under no circumstances should organic solvent be used.

Eye Contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to

Product Identifier: SAKRETE Construction Adhesive - Ver. 1

SDS No.: 0491

Date of Preparation: January 20, 2020

Date of Last Revision: January 20, 2020

Page 02 of 07

do. Call physician immediately.

Ingestion

Rinse mouth with water. Give plenty of water. DO NOT induce vomiting. Get medical attention immediately.

Immediate Medical Attention and Special Treatment

Special Instructions

Treat according to symptoms (decontamination, vital functions),no known specific antidote.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Foam, water spray, dry powder, carbon dioxide.

Unsuitable Extinguishing Media

Water jet.

Specific Hazards Arising from the Product

Hazards during fire-fighting:

nitrous gases, fumes/smoke, isocyanate, vapour.

Special Protective Equipment and Precautions for Fire-fighters

Wear self-contained respiratory protective device.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Do not touch damaged containers or spilled product unless wearing appropriate protective equipment.

Environmental Precautions

Avoid release to the environment. Do not allow into any sewer, on the ground or into any waterway.

Methods and Materials for Containment and Cleaning Up

For small amounts: Absorb isocyanate with suitable absorbent material (see § 40 CFR, sections 260, 264 and 265 for further information). Shovel into open container. Do not make container pressure tight. Move container to a well-ventilated area (outside). Spill area can be decontaminated with the following recommended decontamination solution: Mixture of 90 % water, 8 % concentrated ammonia, 2 % detergent. Add at a 10 to 1 ratio. Allow to stand for at least 48 hours to allow escape of evolved carbon dioxide.

For large amounts: If temporary control of isocyanate vapour is required, a blanket of protein foam or other suitable foam (available from most fire departments) may be placed over the spill. Transfer as much liquid as possible via pump or vacuum device into closed but not sealed containers for disposal.

For residues: The following measures should be taken for final cleanup: Wash down spill area with decontamination solution. Allow solution to stand for at least 10 minutes. Dike spillage.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Provide suitable exhaust ventilation at the processing machines. Ensure thorough ventilation of stores and work areas. Avoid aerosol formation. When handling heated product, vapours of the product should be ventilated, and respiratory protection used. Wear respiratory protection when spraying. Danger of bursting when sealed gastight. Protect against moisture. If bulging of drum occurs, transfer to well-ventilated area, puncture to relieve pressure, open vent and let stand for 48 hours before resealing.

Protection against fire and explosion: Keep away from sources of ignition - No smoking. The relevant fire protection measures should be noted.

Conditions for Safe Storage

Keep in a tightly closed container. Prevent contamination with water and air. If contamination is suspected, do not reseal container. Keep only in the original container in a cool, dry, well-ventilated place away from ignition sources, heat, or flame. Protect from direct sunlight.

Product Identifier: SAKRETE Construction Adhesive - Ver. 1

SDS No.: 0491

Date of Preparation: January 20, 2020

Date of Last Revision: January 20, 2020

Page 03 of 07

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Distillates (petroleum), hydrotreated middle	1 mg/m3					
4,4'-Methylenediphenyl diisocyanate	10 mg/m3 A4		15 mg/m3			
Methylenediphenyl diisocyanate (mixed isomers)			5 mg/m3 (R)			

Appropriate Engineering Controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment.

Individual Protection Measures

Eye/Face Protection

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

Skin Protection

Personal protective equipment for the body should be selected based on the task being performed. This includes gloves, coveralls and footwear. 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. Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

Respiratory Protection

When workers are facing concentrations above the occupational exposure limits they must use appropriate certified respirators. When atmospheric levels may exceed the occupational exposure limit (PEL or TLV) NIOSH-certified air-purifying respirators equipped with an organic vapour sorbent and particulate filter can be used as long as appropriate precautions and change out schedules are in place. For emergency or non-routine, high exposure situations, including confined space entry, use a NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	Tan liquid.
Odour	Not available
Odour Threshold	Not available
pH	Not applicable
Melting Point/Freezing Point	Not available (melting)
Initial Boiling Point/Range	Not available
Evaporation Rate	Not available
Flammability (solid, gas)	Not applicable
Upper/Lower Flammability or Explosive Limit	~ 10.2% (upper); ~ 1.6% (lower)
Relative Density (water = 1)	1.26
Solubility	Insoluble in water
Auto-ignition Temperature	Not available
Other Information	

Product Identifier: SAKRETE Construction Adhesive - Ver. 1
Date of Preparation: January 20, 2020
Date of Last Revision: January 20, 2020

SDS No.: 0491

Page 04 of 07

SECTION 10. STABILITY AND REACTIVITY**Reactivity**

Not reactive under normal conditions of use.

Chemical Stability

Stable under normal handling and storage conditions.

Possibility of Hazardous Reactions

None expected under normal conditions of storage and use.

Conditions to Avoid

Accidental contact with water.

Incompatible Materials

Strong acids, strong bases, strong oxidizing agents, strong reducing agents.

Hazardous Decomposition Products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11. TOXICOLOGICAL INFORMATION**Likely Routes of Exposure**

Inhalation; skin contact; eye contact; ingestion.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Distillates (petroleum), hydrotreated middle		> 5000 mg/kg	> 5000 mg/kg
4,4'-Methylenediphenyl diisocyanate	> 6.82 mg/L (rat)	> 10000 mg/kg (rat)	> 10000 mg/kg (rabbit)
Methylenediphenyl diisocyanate (mixed isomers)		6450 mg/kg (rat)	

Overall product - Acute Toxicity Estimate : LC50 > 50 mg/L

Overall product - Acute Toxicity Estimate : LD50 (oral) > 5000 mg/kg

Overall product - Acute Toxicity Estimate : LD50 (dermal) > 5000 mg/kg

Skin Corrosion/Irritation

Irritating to skin. Corrosive to skin. The product has not been tested. The statement has been derived from the properties of the individual components.

Serious Eye Damage/Irritation

Severe damage to eyes. The product has not been tested. The statement has been derived from the properties of the individual components.

STOT (Specific Target Organ Toxicity) - Single Exposure**Inhalation**

Inhalation of diisocyanates may cause irritation of the mucous membranes of the nose, throat or trachea, breathlessness, chest discomfort, difficult breathing and reduced pulmonary function. High airborne concentrations may result additionally in eye irritation, headache, chemical bronchitis, asthma-like symptoms or pulmonary edema. Isocyanates have also been reported to cause hyper-sensitivity pneumonitis, which is characterized by flu-like symptoms, the onset of which may be delayed. Symptoms include nausea, vomiting and abdominal pain.

Ingestion

No information was located.

Respiratory and/or Skin Sensitization

Sensitization after skin contact possible. The substance may cause sensitization of the respiratory tract.

Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
4,4'-Methylenediphenyl diisocyanate	Group 2B	A4		

Information on: Diphenylmethane-4,4'-diisocyanate (MDI)

Assessment of carcinogenicity: A carcinogenic potential cannot be excluded after prolonged exposure to severely irritating concentrations. These effects are not relevant to humans at occupational levels of exposure.

Information on: P-MDI

Assessment of carcinogenicity: Based on the ingredients there is a suspicion of a carcinogenic effect in humans. IARC Group 3 (not classifiable as to human carcinogenicity).

Information on: Distillates (petroleum), hydrotreated middle

Assessment of carcinogenicity: The substance caused cancer in animal studies.

Information on: Methylenediphenyl diisocyanate

Assessment of carcinogenicity: A carcinogenic potential cannot be excluded after prolonged exposure to severely irritating concentrations. These effects are not relevant to humans at occupational levels of exposure.

Reproductive Toxicity

Development of Offspring

No indications of a developmental toxic / teratogenic effect were seen in animal studies.

Sexual Function and Fertility

Not known to cause effects on sexual function or fertility.

Germ Cell Mutagenicity

The substance was mutagenic in various bacterial test systems; however, a mutagenic effect could not be confirmed in mammalian cell culture.

Other Information

Medical conditions aggravated by overexposure:

The isocyanate component is a respiratory sensitizer. It may cause

allergic reaction leading to asthma-like spasms of the bronchial tubes and difficulty in breathing. Medical supervision of all employees who handle or come into contact with isocyanates is recommended. Contact may aggravate pulmonary disorders. Persons with history of respiratory disease or hypersensitivity should not be exposed to this product.

Preemployment and periodic medical examinations with respiratory function tests (FEV₁, FVC as a minimum) are suggested. Persons with asthmatic conditions, chronic bronchitis, other chronic respiratory diseases, recurrent eczema or pulmonary sensitization should be excluded from working with isocyanates. Once a person is diagnosed as having pulmonary sensitization (allergic asthma) to isocyanates, further exposure is not recommended.

SECTION 12. ECOLOGICAL INFORMATION

Persistence and Degradability

Poorly biodegradable. The product is unstable in water. The elimination data also refer to products of hydrolysis.

Bioaccumulative Potential

This product and its degradation products are not known to bioaccumulate.

Mobility in Soil

If released into the environment, this product is not expected to move through the soil, based on physical and chemical properties.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and

Product Identifier: SAKRETE Construction Adhesive - Ver. 1

SDS No.: 0491

Date of Preparation: January 20, 2020

Date of Last Revision: January 20, 2020

Page 06 of 07

sewers.

SECTION 14. TRANSPORT INFORMATION

Not regulated under US DOT Regulations. Not regulated under IATA Regulations.

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group

Special Precautions Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

USA

Additional USA Regulatory Lists

This product contains a chemical known to the State of California to cause cancer.

SECTION 16. OTHER INFORMATION

SDS Prepared By King Packaged Materials Company

Phone No. 905-639-2993

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Disclaimer To the best of our knowledge, the information contained herein is accurate. However, neither King Packaged Materials Company, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Product Identifier: SAKRETE Construction Adhesive - Ver. 1

SDS No.: 0491

Date of Preparation: January 20, 2020

Date of Last Revision: January 20, 2020

Page 07 of 07