



PRODUCT: **SikaForce®-7711 L20** PART A

SECTION IV: FIRE AND EXPLOSION HAZARDS

Flammability:	No	TDG Flammability Class:	Not Applicable
If Yes, under what conditions:		Flammable upper limits (% vol.):	Not Available
		Flammable lower limits (% vol.):	Not Available
		Boiling Point:	Not Available
Extinguishing methods:	Water, CO ₂ , dry chemical (BC), foam	Flash Point (setafлах closed cup):	> 200°C
		Auto-ignition temperature:	Not Available
		Dangerous Combustion Products:	Carbon oxides
Unsuitable Extinguishing Methods:	Water with full jet	Protect from mechanical impact:	Not sensitive
		Protect from static discharge:	Not sensitive
Special Hazards:	May generate toxic, irritating or flammable combustion products	Rate of burning:	Not available
Firefighting Measures:	Not classified	Explosion power:	Not expected
Protective Equipment:	Firefighter wear full breathing apparatus		

SECTION V: REACTIVITY

Chemical stability:	Yes	Dangerous decomposition products:	Carbon oxides. Also thermal decomposition may produce aldehydes.
If not, under what conditions:			
Incompatibility with other material:	Yes	Polymerization Risks:	Will not occur
If Yes, which ones:	Amines, alkamines, caustic inorganic acids, strong oxidizing agents, strong acids/bases.	Reactivity under which conditions:	Contact with incompatible substances at elevated temperatures.



PRODUCT: SikaForce®-7711 L20 PART A

SECTION VI: TOXIC PROPERTIES

ROUTE OF ENTRY / CONTACT

Eyes: May cause irritation

Skin contact: May cause irritation
 Skin absorption : No known hazard

Inhalation: No known hazard

Ingestion: May cause irritation, to the GI system

Prolonged contact with skin should be avoided as irritation may occur.

Avoid contact with eyes.

Carcinogenicity: Not established

Toxic effects on reproduction: Not established

Teratogenicity: Not established

Mutagenicity: Not established

Product with synergistic effects: None known

This product has a very low order of acute toxicity and does not represent a significant health hazard to users. The product does however contain components of an organic nature and the hazard assessment is based on a condition of these components.

An acute or chronic exposure will increase the toxic effects mentioned in this section and may aggravate respiratory problems.



PRODUCT: SikaForce®-7711 L20 PART A

SECTION VII: PREVENTIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT

Gloves: Neoprene coated gloves

Respiratory equipment: Not required under normal use and conditions. An air purifying respirator designed for organic vapor should provide adequate protection when handling heated product.

Eyes: Wear splash-proof chemical goggles

Shoes: Safety boots per local regulations

Clothing: No specific clothing is required

Other/type: Eye wash facility should be in close proximity. Wash hands prior to smoking and consuming food

OTHERS

Ventilation: Use exhaust ventilation to remove vapor

Procedure in case of leaks: Remove all sources of ignition (flames, sparks, etc.). Provide adequate ventilation. Avoid prolonged breathing of vapors. Remove to a container or absorb with clay, diatomaceous earth or other suitable inert absorbent. Dispose as prescribed regulations

Handling and Equipment Methods: Avoid inhalation, skin and eye contact. Wash repeatedly with soap and water during the workday.

Warehouse Requirements: Keep all containers closed in a cool, dry and well ventilated area.

Special Shipping Instructions: See TDG class.

Waste Disposal: Dispose of residues according to municipal, provincial or federal laws for disposal of chemicals. Do not incinerate closed containers. Follow in-house company procedures.



PRODUCT: SikaForce®-7711 L20 PART A

SECTION VIII: FIRST AID

General Information: The actions below are those necessary for any chemical which does not have any special medical effects.
Contaminated clothing should be removed and washed before being re-used.

Skin: Wash thoroughly with soap and water at least 15 minutes.
Remove contaminated clothing wash prior to re-use.
If irritation persists, or if a rash develops, consult a physician

Eyes: Rinse eyes immediately with plenty of water for at least 15 minutes to ensure a proper wash.
Consult a physician immediately if there is any irritation.

Inhalation: In the case of overexposure, evacuate to fresh air – if not breathing qualified personnel should administer artificial respiration
Consult a physician.

Ingestion: Immediately rinse mouth out with water and seek medical attention.
If this is not immediately available, drink one or two pints of water.
Do not induce vomiting.
Do not give anything by mouth to an unconscious person.
See a physician immediately.

Additional information: Inadvertent inhalation of vomited material may seriously damage the lungs.

SECTION IX: PREPARATION INFORMATION

Prepared By: R & D of Sika Canada Inc.
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SECTION I: PRODUCT INFORMATION

PRODUCT: **SikaForce®-7711 L20** **PART B** REVISION DATE: January 15th, 2015

USAGE: PART TWO HARDENING COMPONENT FOR SIKAFORCE® 7711

MANUFACTURER/SUPPLIER: SIKA CANADA INC.
601, avenue Delmar
Pointe Claire, QC
H9R 4A9

EMERGENCY TELEPHONE NUMBER: CANUTEC (collect) (613) 996-6666

TDG CLASSIFICATION: Not Regulated WHMIS Classification: D2A, D2B
UN NUMBER: Not Applicable Class: Not Regulated
Packaging Group: Not Applicable

SECTION II: HAZARDOUS INGREDIENTS

Hazardous ingredients	%	T.L.V.	# CAS	LD ₅₀ (mg/kg) (species, route)	LC ₅₀ (species, route)
Polymeric Diphenylmethane diisocyanate	60 - 100	Not listed	9016-87-9	> 10 000 (rat, oral)	490mg/m ³ /4H (rat)

SECTION III: PHYSICAL CHARACTERISTICS

Physical State: Liquid
Appearance and Odor: Dark Amber; Slight musty odor
Odor Threshold: 4.0 mg/m³
Evaporation Rate: Not available
Vapor Density: 8.5
Vapor Pressure: 4.0 x 10⁻⁶ mm Hg @ 30°C
Boiling Point: Not Available
Melting Point: Not Available
Freezing Point: Not Available

Solubility (water): Immiscible with water, but will react with water to produce inert and non-biodegradable solids (see section 5-)
Solubility (other): Soluble in most organic solvents
pH: Not Applicable
% volatility by volume: Not Available
Water/Oil Distribution: Not Available
Specific Gravity: 1.2 (water = 1)
Viscosity : Not Available



PRODUCT: SikaForce®-7711 L20

PART B

SECTION IV: FIRE AND EXPLOSION HAZARDS

Flammability: If Yes, under what conditions:	No	TDG Flammability Class:	Not Applicable
Extinguishing methods:	<u>Small fire</u> = Dry chemical powder, CO ₂ <u>Large fire</u> = Water spray, fog or foam. Do not use water jet.	Flammable upper limits (% vol.):	Not Available
		Flammable lower limits (% vol.):	Not Available
		Flash Point (setafiah closed cup):	218°C
		Auto-ignition temperature:	240°C
		Dangerous Combustion Products:	Carbon oxides, nitrogen oxides and some HCN
		Protect from mechanical impact:	Not sensitive
		Protect from static discharge:	Not sensitive
Special Hazards:	When heated and exposed to water a dangerous reaction developing pressure will occur that can rupture closed containers. May generate toxic, irritating or flammable combustion products.	Rate of burning:	Not available
Firefighting Measures:	Not classified as flammable.	Explosion power:	Not expected
Protective Equipment:	Firefighter wear full breathing apparatus		

SECTION V: REACTIVITY

Chemical stability: If not, under what conditions:	Stable Elevated temperature and freezing	Dangerous decomposition products:	Carbon oxides. Also thermal decomposition may produce nitrogen oxides and HCN.
Incompatibility with other material: If Yes, which ones:	Yes Active hydrogen such as water, alcohol, bases and acids.	Polymerization Risks:	Highly unlikely under normal industrial uses. Polymerization may occur at elevated temperature in the presence of alkalis, tertiary amines and metal compounds.
The reaction with water is very slow at less than 50°C but is accelerated at higher temperatures.		Reactivity under which conditions:	Contact with incompatible substances at elevated temperatures.



PRODUCT: SikaForce®-7711 L20 PART B

SECTION VI: TOXIC PROPERTIES

ROUTE OF ENTRY / CONTACT

Effects of acute/chronic exposure :

Eyes: The vapor, aerosol, and liquid are an irritant.

Skin contact: Moderate irritant, can be a skin sensitizer.

Skin absorption: No known hazard

Inhalation: Is a respiratory irritant and potential respiratory sensitizer.

Ingestion: May cause irritation of the gastrointestinal tract. Based on the acute LD50, this product is considered practically non-toxic by ingestion.

Repeated inhalation of vapors or aerosols at levels above the occupational exposure limit could cause respiratory sensitization. Symptoms may include irritation to the eyes, nose, throat, and lungs, possibly combined with constriction of the throat, tightness of the chest, and difficulty in breathing. The onset of the respiratory symptoms may be delayed for several hours after exposure. A hyper-reactive response to even minimal concentration of MDI may develop in sensitized persons.

Carcinogenicity effects: None known

Teratogenicity: None known

Mutagenicity: None known

Synergistic Materials: None known

Repeated and/or prolonged contact may cause skin sensitization. There is limited evidence from animal studies that skin contact may play a role in respiratory sensitization. These results emphasize then need for protective clothing including gloves to be worn at all times when handling these chemicals or in maintenance work.

An acute or chronic exposure will increase the toxic effects mentioned in this section and may aggravate respiratory problems.



PRODUCT: SikaForce®-7711 L20

PART B

SECTION VII: PREVENTIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT

Gloves:

Chemical resistant gloves.
Thin latex gloves should be avoided for repeated or long term use.

Respiratory equipment:

An air purifying respirator designed for organic vapor with a HEPA P100 should provide adequate protection when *handling heated product*.

Eyes:

Wear splash-proof chemical goggles
When there is the potential for splashing, a full face shield should be worn.

Shoes:

Safety boots per local regulations

Clothing:

No specific clothing is required, but closed and complete coverage is advised.

Other/type:

Eye wash facility should be in close proximity. Wash hands prior to smoking and consuming food.

Personal protection in cases of large spills:

Splash goggles. Full suit. Vapor respirator or a self contained breathing apparatus. Chemically resistant boots and gloves. Suggested protective clothing may not be sufficient in some case of very large spills; consult a specialist before handling this product.

Ventilation:

Use exhaust ventilation to maintain vapor concentrations below occupational health and safety guidelines (see VI). Suitable respiratory equipment should be available in situations when insufficient ventilation or operational procedures demand additional protection.

Procedure in case of leaks:

Clean up by trained personnel. Evacuate the area. Prevent further leakage, spillage or entry into drains and water table. Contain and absorb large spills onto an inert, non-flammable, absorbent moistened carrier (earth or sand). Shovel open top drums or plastic bags for further decontamination, if necessary. Do not seal the bags or tighten the drum lids as dangerous carbon dioxide gas pressure may develop from the reaction of isocyanine and water. Wash the spillage area with liquid detergent, ethoxylated nonylphenol, Tergitol type or similar reactive hydroxyl containing surfactant, with a 3.0% ammonia concentration or 50-10% sodium carbonate. Remove and properly dispose of the residues.

Procedure in case of leaks (continued):

Test the area prior to re-use for atmospheric MDI and use only after the levels are below the OSHA PEL ceiling. As an alternate for the decontamination solution as isocyanine reactive material can be used like polyethylene or polypropylene glycol and absorbent sand. The reacted material should be left for 30 minutes and then similarly shoveled into open top drums or plastic bags for disposals.

Handling and Equipment Methods:

Avoid personal contact with the product of reacting mixtures. Use only with adequate ventilation to ensure that the occupational exposure limit is not exceeded.

The efficiency of the ventilation system must be monitored regularly because of the possibility of blockage.

Avoid breathing aerosols, mist and vapors.

Wash repeatedly with soap and water during the workday

Warehouse Requirements:

Keep all containers closed in a cool, dry and well ventilated area. Ideal storage temperature is 16-38°C
Keep containers properly sealed and when stored indoors, in a well ventilated area.
Keep contents away from moisture.
Due to reaction with water, producing carbon dioxide gas, a hazardous build-up of pressure could result if contaminated containers are re-sealed.
Do not reseal contaminated containers.
Un-contaminated containers free of moisture may be resealed only after placing under a blanket of dry nitrogen gas.
Do not store in containers made of copper, copper alloys or galvanized surface.

Special Shipping Instructions:

See TDG class.

Waste Disposal:

The generation of waste should be avoided or minimized whenever possible

Dispose of residues according to municipal, provincial or federal laws for disposal of chemicals.

This product (and the decontaminated material) is not a hazardous waste under RCFA 40 CFR 261. Small quantities should be treated with the decontamination solution listed above.

Chemical waste, even small quantities should never be poured down drains or into waterways.

Empty containers should be decontaminated and either passed to an approved drum recycler or destroyed.

Follow in-house company procedure.



PRODUCT: **SikaForce®-7711 L20** PART B

SECTION VIII: FIRST AID

- General Information:** In case of accident or if you feel unwell, seek medical advice immediately. Show label where possible. Product contains (pMDI) Polymeric Diphenyl Methylene diisocyanate. Isocyanate contamination can occur from inhalation of vapor. In sensitized individuals this can occur at any concentrations.
- Skin:** Remove contaminated clothing and wash immediately with plenty of water and soap for at least 15 minutes. Some organic materials such as corn oil or polypropylene or polyethylene glycol are effective in decontaminating MDI from the skin when applied immediately. Wash contaminated clothing prior to re-use. In case of persistent irritation, or if a rash develops, seek medical
- Eyes:** Rinse eyes immediately with plenty of water eyelids open for at least 15 minutes. Consult a physician immediately if there is any irritation.
- Inhalation:** Remove victim to fresh air. Treatment should be symptomatic for primary irritation of difficulty breathing – if not breathing qualified personnel should administer oxygen or artificial respiration – seek medical attention.
- Ingestion:** Do not induce vomiting.
If subject is conscious immediately rinse mouth out with water
If medical attention is not immediately available, drink one or two pints of water.
Do not give anything by mouth to an unconscious person.
See a physician immediately.
- Additional information:** Inadvertent inhalation of vomited material may seriously damage the lungs. Symptomatic and supportive therapy as needed. Following severe exposure medical follow-up should be monitored for at least 48 hours. Bronchospasm may be delayed in onset from time of contamination. All people with a known sensitization to isocyanates should seek medical attention immediately after contamination.

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