Boden gut, alles gut!
Expect more from your floor.

Safety Data Sheet
acc. to OSHA HCS

Printing date 03/01/2022 Reviewed on 03/01/2022

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1: Identification

· **1.1 Product identifier**

· **Trade name: SILIKAL Additive I**
· **Application of the substance / the preparation:** Additive

· **1.3 Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
Silikal America
609-B Fertilla Street
Carrollton, GA 30117
Tel.: 770.830.1404
Fax.: 777.830.9213
info@silikalamerica.com

· **Information department:** Silikal America
· **1.4 Emergency telephone number:** INFOTRAC 1-800-535-5053

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2: Hazard(s) identification

· **2.1 Classification of the substance or mixture**
· **Classification according to Regulation (EC) No 1272/2008**

Flam. Liq. 2	H225	Highly flammable liquid and vapor.
Skin Irrit. 2	H315	Causes skin irritation.
Eye Irrit. 2A	H319	Causes serious eye irritation.
Resp. Sens. 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin Sens. 1	H317	May cause an allergic skin reaction.
Carc. 2	H351	Suspected of causing cancer.
STOT SE 3	H335	May cause respiratory irritation.

· **2.2 Label elements**
· **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labeled according to the CLP regulation.
· **Hazard pictograms**

GHS02 GHS07 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**
Aromatic polyisocyanate prepolymer
methyl methacrylate
4-methyl-m-phenylene diisocyanate
· **Hazard statements**
H225 Highly flammable liquid and vapor.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
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.
· **Precautionary statements**

P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray
P280	Wear protective gloves/protective clothing/eye protection/face protection.

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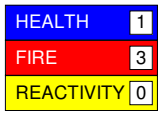
P280 Wear protective gloves / eye protection / face protection.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**
· **NFPA ratings (scale 0 - 4)**

Health = 1
Fire = 3
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 1
Fire = 3
Reactivity = 0

· **2.3 Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

3: Composition/information on ingredients

· **3.2 Chemical characterization: Mixtures**
· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**		
37273-56-6	Aromatic polyisocyanate prepolymer Eye Irrit. 2A, H319; Skin Sens. 1, H317	50-100%
80-62-6	methyl methacrylate Flam. Liq. 2, H225; Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335	25-50%
584-84-9	4-methyl-m-phenylene diisocyanate Acute Tox. 2, H330; Resp. Sens. 1, H334; Carc. 2, H351; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	≤ 0.5%

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

4: First-aid measures

· **4.1 Description of first aid measures**
· **General information:**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
· **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
· **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
· **After swallowing:** Call a doctor immediately.
· **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.

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· **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5: Fire-fighting measures

· **5.1 Extinguishing media**
· **Suitable extinguishing agents:**
Foam
CO2, extinguishing powder or water spray. Fight larger fires with water spray.
CO2, sand, extinguishing powder. Do not use water.
· **For safety reasons unsuitable extinguishing agents:**
Water
Water with full jet
· **5.2 Special hazards arising from the substance or mixture**
Exothermic polymerization.
In case of fire, the following can be released:
Carbon monoxide and carbon dioxide
Hydrogen cyanide (HCN)
(Traces)
· **5.3 Advice for firefighters**
· **Protective equipment:**
Mouth respiratory protective device.
Wear self-contained respiratory protective device.
· **Additional information**
Collect contaminated fire fighting water separately. It must not enter the sewage system.
Cool endangered receptacles with water spray.

6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation
Wear protective clothing.
Keep away from ignition sources
Use respiratory protective device against the effects of fumes/dust/aerosol.
Wear protective equipment. Keep unprotected persons away.
· **6.2 Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Prevent seepage into sewage system, workpits and cellars.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
· **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
· **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7: Handling and storage

· **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.

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· **Information about protection against explosions and fires:**
Fumes can combine with air to form an explosive mixture.
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

· **7.2 Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:**
Store only in the original receptacle.
Store in cool, dry conditions in well sealed receptacles.
Do not allow to enter sewers/ surface or ground water.
Store in a cool location.
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:**
Store receptacle in a well ventilated area.
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
· **Maximum storage temperature:** 25 °C
· **7.3 Specific end use(s)** No further relevant information available.

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8: Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **8.1 Control parameters**

· **Components with limit values that require monitoring at the workplace:**	
80-62-6 methyl methacrylate	
PEL	Long-term value: 410 mg/m³, 100 ppm
REL	Long-term value: 410 mg/m³, 100 ppm
TLV	Short-term value: 410 mg/m³, 100 ppm Long-term value: 205 mg/m³, 50 ppm DSEN
584-84-9 4-methyl-m-phenylene diisocyanate	
PEL	Ceiling limit value: 0.14 mg/m³, 0.02 ppm
REL	See Pocket Guide App. A
TLV	Short-term value: (0.14) NIC-0.035* mg/m³, (0.02)NIC- 0.005* ppm Long-term value: (0.036) NIC-0.007* mg/m³, (0.005) NIC-0.001* ppm *inh.fraction+vapour (SEN);NIC-Skin;A3;DSEN,RSEN

· **Additional information:** The lists that were valid during the creation were used as basis.

· **8.2 Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.
· **Breathing equipment:**
Workplace must be properly ventilated and monitored to maintain air quality below the TLV.
Organic vapour respirators are required only when levels meet or exceed these values. A self contained breathing apparatus is required in confined spaces.
Filter AX or Organic Vapour Cartridge.
· **Recommended filter device for short term use:** Filter A

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· **Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation (EN 374)

· **Material of gloves** Butyl rubber, BR
· **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
For the mixture of chemicals mentioned below the penetration time has to be at least 60 minutes (Permeation according to EN 374 Part 3: Level 3).
· **Eye protection:**

Tightly sealed goggles

· **Body protection:** Protective work clothing

9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Fluid
Color:	Light brown
· **Odor:**	Characteristic
· **Odor threshold:**	Not determined.
· **pH-value:**	Not determined.
· **Change in condition**	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C (212 °F)
· **Flash point:**	10 °C (50 °F)
· **Flammability (solid, gaseous):**	Not applicable.
· **Ignition temperature:**	430 °C (806 °F)
· **Decomposition temperature:**	Not determined.
· **Auto igniting:**	Product is not selfigniting.
· **Danger of explosion:**	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· **Explosion limits:**	
Lower:	2.1 Vol %
Upper:	12.5 Vol %
· **Vapor pressure at 20 °C (68 °F):**	38.7 hPa (29 mm Hg)
· **Density at 20 °C (68 °F):**	1.03 g/cm³ (8.595 lbs/gal)
· **Relative density**	Not determined.
· **Vapor density**	Not determined.

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· **Evaporation rate**	Not determined.
· **Solubility in / Miscibility with Water:**	Not miscible or difficult to mix.
· **Partition coefficient (n-octanol/water):**	Not determined.
· **Viscosity:**	
Dynamic at 20 °C (68 °F):	70 mPas
Kinematic:	Not determined.
· **Solvent content:**	
Organic solvents:	0.0 %
Solids content:	66.1 %
· **9.2 Other information**	No further relevant information available.

10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.
· **10.2 Chemical stability**
· **Thermal decomposition / conditions to be avoided:** Keep away from heat and direct sunlight.
· **10.3 Possibility of hazardous reactions**
Exothermic polymerization.
Reacts with alcohols, amines, aqueous acids and alkalis.
· **10.4 Conditions to avoid** No further relevant information available.
· **10.5 Incompatible materials:** Reacts with peroxides and other radical forming substances.
· **10.6 Hazardous decomposition products:**
Isocyanate
Hydrocarbons
Carbon monoxide and carbon dioxide
· **Additional information:**
Do not allow product to reach sewage system or any water course.
Prevent seepage into sewage system, workpits and cellars.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.

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11: Toxicological information

· **11.1 Information on toxicological effects**
· **Acute toxicity:** Based on available data, the classification criteria are not met.

· **LD/LC50 values that are relevant for classification:**		
584-84-9 4-methyl-m-phenylene diisocyanate		
Oral	LD50	5800 mg/kg (rat)

· **Primary irritant effect:**
· **on the skin:**
Causes skin irritation.
· **on the eye:**
Causes serious eye irritation.
· **Sensitization:**
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
· **Additional toxicological information:**

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**		
80-62-6	methyl methacrylate	3

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· **NTP (National Toxicology Program)**

584-84-9	4-methyl-m-phenylene diisocyanate	R

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12: Ecological information

· **12.1 Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **12.2 Persistence and degradability** No further relevant information available.
· **12.3 Bioaccumulative potential** No further relevant information available.
· **12.4 Mobility in soil** No further relevant information available.
· **Additional ecological information:**
· **General notes:**
Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
· **12.5 Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **12.6 Other adverse effects** No further relevant information available.

13: Disposal considerations

· **13.1 Waste treatment methods**
· **Recommendation:**
Must be specially treated adhering to official regulations.
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packagings:**
· **Recommendation:**
Packaging can be reused or recycled after cleaning.
Packagings that cannot be cleansed are to be disposed of in the same manner as the product.
· **Recommended cleansing agent:** Acetone, ethylacetate

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14: Transport information

· **14.1 UN-Number**
· **DOT, ADR, IMDG, IATA** UN1866

· **14.2 UN proper shipping name**
· **DOT, IATA** Resin solution
· **ADR** 1866 Resin solution
· **IMDG** RESIN SOLUTION

· **14.3 Transport hazard class(es)**

· **DOT**

· **Class** 3 Flammable liquids

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· **Label**	3
· **ADR, IMDG, IATA**	
	
· **Class**	3 Flammable liquids
· **Label**	3
· **14.4 Packing group**	
· **DOT, ADR, IMDG, IATA**	II
· **14.5 Environmental hazards:**	
· **Marine pollutant:**	No
· **14.6 Special precautions for user**	Warning: Flammable liquids
· **Danger code (Kemler):**	33
· **EMS Number:**	F-E,S-E
· **Stowage Category**	B
· **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **Transport/Additional information:**	
· **ADR**	
· **Excepted quantities (EQ)**	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· **IMDG**	
· **Limited quantities (LQ)**	5L
· **Excepted quantities (EQ)**	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· **UN "Model Regulation":**	UN 1866 RESIN SOLUTION, 3, II

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15: Regulatory information

· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **Sara**

· **Section 355 (extremely hazardous substances):**

584-84-9	4-methyl-m-phenylene diisocyanate

· **Section 313 (Specific toxic chemical listings):**

80-62-6	methyl methacrylate
584-84-9	4-methyl-m-phenylene diisocyanate

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

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· **Chemicals known to cause reproductive toxicity for males:**
None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**
None of the ingredients is listed.

· **Cancerogenity categories**

· **EPA (Environmental Protection Agency)**

80-62-6	methyl methacrylate	E, NL

· **TLV (Threshold Limit Value established by ACGIH)**

80-62-6	methyl methacrylate	A4
584-84-9	4-methyl-m-phenylene diisocyanate	(A4)

· **MAK (German Maximum Workplace Concentration)**

584-84-9	4-methyl-m-phenylene diisocyanate	3A

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

584-84-9	4-methyl-m-phenylene diisocyanate

· **AGW (German Workplace Threshold Value)**

80-62-6	methyl methacrylate

· **National regulations:**

· **Technical instructions (air):**

Class	Share in %
I	0,5-2,5
NK	25-50

· **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** Silikal America
· **Date of preparation / last revision** 04/27/2016 / 8
· **Abbreviations and acronyms:**
Flam. Liq. 2: Flammable liquids, Hazard Category 2
Acute Tox. 2: Acute toxicity, Hazard Category 2
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A
Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
Carc. 2: Carcinogenicity, Hazard Category 2
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
· *** Data compared to the previous version altered.**