

Version: 3
Print date: 2016-03-17
Issuer: SolliQ AB**1. IDENTIFICATION OF SUBSTANCE/PREPARATION AND COMPANY**

Product Name	Soil Binder® Engineered Formula
Supplier	SolliQ AB
Telephone	+46 40 186300
WWW	www.solliq.com
E-Mail	info@solliq.com
Emergency Number	Kemiakuten 020-99 60 00, SOS 040-6769040
Uses	Aqueous Acrylic Vinyl Acetate Polymer Emulsion
Manufacturer	SolliQ AF AB, Inc. (www.solliq.com)

**2. Hazards identification**

Risk	Does not apply
Classification	Does not apply
Label Info / Hazard Pictogram	Does not apply
Signal words	Does not apply
Hazard statements	Does not apply
Other risks	Product is essentially harmless. When heated above 100°C material can splatter. Dried polymer film can burn but will not support combustion.

**3. Composition/Information on ingredients**

Subject names	CAS-no	EG-no	Hazard classes	Risk phrases	Content
Co-Polymers					
Acrylic & Polyvinyl Acetate Polymer	-		Non-hazardous	Non-hazardous	>20-40%
Styrene Acrylic Polymer	-		Non-hazardous	Non-hazardous	>20-40%
Water	7732-18-5		Non-hazardous	Non-hazardous	>40%

Free Text:

Secret ingredients cannot be revealed. Environmentally friendly. Swedish Chemical Agency has been provided with information on proprietary ingredients.

**4. First aid**

Symptoms	
Inhalation	Move subject to fresh air.
Skin contact	Flush with large amount of water or wash with soap and water.
Splashes in eyes	Flush eyes with flowing water at least 15 minutes, get medical attention.
Ingestion	Give water to drink. Call a physician.
Medical information	Never give fluids or induce vomiting if patient is unconscious or having convulsions.

**5. Fire-fighting measures**

Extinguishing media Emulsion, >98,8°C
Small fire: extinguishing with powder, foam, carbon dioxide.
Large fire: Douse with water, fog or foam

**6. Measures in case of spillage/unintentional discharge**

General Dike and control spill. Transfer liquid to containers for recovery or disposal.
Keep spills out of sewers and open bodies of water.

**7. Handling and storage**

Handling Keep in a cool, dry, ventilated storage area and in closed containers. Avoid freezing temperatures. Minimize contact with the air to prevent microorganism contamination and reduce the formation of skins on the surface.

Storage Handle in a well-ventilated workplace

**8. Exposure controls/personal protection**

Personal protective equipment (PPE) Respiratory protection is not required if good ventilation is maintained. Ventilation using a mechanical exhaust at point of contamination. Eye protection in the form of chemical splash goggles recommended. Under normal handling conditions, the risk of exposure to residual monomer is negligible.

**9. Physical and chemical properties**

Color	Milky White
Form	Liquid
Odor	Characteristic Acrylic odor
Density Kg/m³	1,01 to 1,15 at 20°C
Vapor pressure mm Hg @20°C	17
Freezing/ Melting Point °C	N/A
Flash Point °C	Emulsion, >98°C
Boiling Point °C	>100°C
Ignition Temperature °C	N/A
Solubility in organic solvents	Dilutable
Oxidizing properties	None
Miscellaneous	pH = 4.0 to 9.5

**10. Stability and reactivity**

Reactivity	Stable
Chemical stability	Stable
Possibility of hazardous reactions	Does not apply
Conditions to be avoided	N/A
Incompatible materials	No hazardous reactions are expected to occur under normal industrial conditions.
Hazardous decomposition products	Thermal decomposition in the presence of air may yield Carbon monoxide and/or carbon dioxide and water.
Hazardous polymerization	Does not occur



11. Toxicological information

Acute toxicity	Vapor from stored, undiluted product can cause headache and nausea.
Irritation	Stored, undiluted product is slightly irritating to skin.
Corrosive effect	Does not apply
Sensitization	N/A
Mutagenicity	N/A
Repeated dose toxicity	N/A
Inhalation	Vapor from stored, undiluted product can cause headache and nausea.
Skin contact	Stored, undiluted product is slightly irritating to skin.
Splashes in eye	Slightly irritating to eyes.
Ingestion	May irritate digestive tract.
Test results	The 48 hour LC50 for Daphnia Magna based on nominal test concentrations and mortality at the end of testing was calculated to be 3,482.8 parts per million (ppm).
LD50 Oral	12.000 to 25.000 LC ₅₀ PPM mg/kg (goldfish)
LD50 Dermal	12.000 to 25.000 LC ₅₀ PPM mg/kg (goldfish) see table 1.



12. Ekologisk information

Water	See table below
Acute toxicity for fish	See table below
Acute toxicity för algae	See table below
Biodegradability	Biologically biodegradable
Bio-accumulative potential	N/A
Mobility in soil	Stable and with binding properties
Results of PBT- and PvB-assessments	N/A
Other adverse effects	Animal toxicity studies on blended Soil-Binder® have not been carried out because we believe the fish toxicity studies done on the blend demonstrate it is as non-toxic as the individual emulsions which go into the blend. TABLE #1 gives the results of our fish toxicity tests. In summary, these data show that the LC50 of Soil-Binder® on goldfish is somewhere above 12,500 ppm. This is extremely low toxicity, especially in view of the legal requirement that chemicals must be labeled "toxic to fish" only if their LC50 is less than 1.0 ppm. The 48 hour LC50 for Daphnia Magna based on nominal test concentrations and mortality at the end of testing was calculated to be 3,482.8 parts per million (ppm).

TABLE I
FISH TOXICITY STUDIES

EMULSION NUMBER	TYPE OF FISH	HOURS	LC ₅₀ PPM
C	Rainbow Trout	24	10,000
C	Rainbow Trout	96	8,950
C	Bluegill Sunfish	24	10,000
C	Bluegill Sunfish	96	5,640
C	Goldfish	24	4,200
H	Goldfish	24	7,500
G	Goldfish	24	10,000
D	Goldfish	24	13,400
F	Goldfish	24	13,400
SOIL-SEMENT*	Goldfish	24	12,500 - 25,000
SOIL-SEMENT*	Goldfish	48	12,500 - 25,000
SOIL-SEMENT*	Goldfish	72	12,500 - 20,000
B	Goldfish	24	24,000
E	Goldfish	24	24,000

**13. Disposal considerations**

Waste management	Coagulate the emulsion by the stepwise addition of ferric chloride and lime or the addition of sand or other absorbent material. Remove the clear supernatant liquid and flush to a chemical sewer or landfill. Incinerate solids and the contaminated diking material according to local, regulations.
Packaging	Do not re-use containers. Do not weld on metal containers.
Waste code (EWC)	User responsibility

**14. Transport information**

UN-number	None
UN proper shipping name	Liquid plastic, NOS
Transport hazard class/es	None
Packing group	Non-regulated
Environmental hazards	N/A
Special precautions	None
Bulk transport with MARPOL 73/79 and IBC-code	None
Meaning of phrases	H335-may cause irritation of the respiratory tract when heated above 100°C
Other:	Non-dangerous goods according to ADR/RID, IMDG and DGR.

**15. Regulatory information**

EU-injunctions	European Parliament and Council Regulation (EC) No 1907/2006 (REACH). European Parliament and of the Council Regulation (EC) no 1272/2008, the CLP. Commission Regulation (EU) no 453/2010 of 20 May 2010 amending and Council Regulation (EC) No 1907/2006 concerning the registration, evaluation, authorization and restriction of chemicals. Annex II, Material Safety data Sheets.
National injunctions	Work environment authority's regulations and general advice on exposure limit values (AFS 2011:18). Waste Regulation (2011:927). Swedish Chemistry Agency Regulations Trafikverket's Chemsoft

**16. Annan information**

Changes with respect to previous revision -

References to the important literature and data sources

Europaparlamentets och rådets förordning (EG) nr 1907/2006, (REACH).
Europaparlamentets och rådets förordning (EG) nr 1272/2008.
Kommissionens förordning (EU) nr 453/2010 av den 20 maj 2010 om ändring av Europaparlamentets och rådets förordning (EG) nr 1907/2006 om registrering, utvärdering, godkännande och begränsning av kemikalier. Bilaga II, Säkerhetsdatablad.
Arbetsmiljöverkets föreskrifter och allmänna råd om hygieniska gränsvärden (AFS 2011:18). Avfallsförordning (2011:927).
Europaparlamentets och rådets förordning (EG) nr 648/2004 om tvätt- och rengöringsmedel.
Information även hämtad från ingående ämnes säkerhetsdatablad.

Meaning of phrases**ABBREVIATIONS AND SYMBOLS:**

N.D. - Not Determined
N.A. - Not Applicable
N.T. - Not Tested
< - LESS THAN
> - MORE THAN