

Safety Data Sheet

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 regulations


Printing date: May 02, 2017

Revision: May 02, 2017

1 Identification

- **Product identifier**
- **Trade name:** EkoBond
- **Other means of identification:** No other identifiers
- **Recommended use and restriction on use**
- **Recommended use:** Adhesive.
- **Restrictions on use:** No relevant information available.
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
Stewart Systems
8878 Harmony Church Rd.
Johnstown, OH 43031
USA
888-356-7659 (Toll-Free)
509-782-3626 (International)
- **Emergency telephone number:**
ChemTel Inc.
(800)255-3924 (North America)
+1 (813)248-0585 (International)

2 Hazard(s) identification

- **Classification of the substance or mixture**
Repr. 2 H361 Suspected of damaging fertility or the unborn child. Route of exposure: Inhalation.
STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure. Route of exposure: Inhalation.
- **Label elements**
- **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:**

GHS08
- **Signal word:** Warning
- **Hazard statements:**
H361 Suspected of damaging fertility or the unborn child. Route of exposure: Inhalation.
H373 May cause damage to organs through prolonged or repeated exposure. Route of exposure: Inhalation.
- **Precautionary statements:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe mist/vapors/spray.
P280 Wear protective gloves/protective clothing/eye protection.
P308+P313 IF exposed or concerned: Get medical advice/attention.

(Cont'd. on page 2)

Safety Data Sheet

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 regulations

Printing date: May 02, 2017

Revision: May 02, 2017

Trade name: EkoBond

(Cont'd. of page 1)









P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Other hazards** There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

· **Chemical characterization:** Mixtures

· **Components:**

108-88-3	toluene	 Flam. Liq. 2, H225  Repr. 2, H361; STOT RE 2, H373; Asp. Tox. 1, H304  Skin Irrit. 2, H315; STOT SE 3, H336  Eye Irrit. 2B, H320	<10%
67-56-1	methanol	 Flam. Liq. 2, H225  Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331  STOT SE 1, H370  Eye Irrit. 2B, H320	1-3%

· **Additional information:** For the wording of the listed Hazard Statements refer to section 16.

4 First-aid measures

· **Description of first aid measures**

· **General information:**

Take affected persons out into the fresh air.
 Immediately remove any clothing soiled by the product.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:**

Do not pull solidified product away from the skin.
 Immediately wash with water and soap and rinse thoroughly.
 If skin irritation continues, consult a doctor.

· **After eye contact:**

Remove contact lenses if worn, if possible.
 Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:**

Rinse out mouth and then drink plenty of water.
 Do not induce vomiting; immediately call for medical help.

· **Most important symptoms and effects, both acute and delayed:**

Headache
 Dizziness
 Coughing
 Nausea
 Gastric or intestinal disorders when ingested.
 Vision disorders.
 Acidosis

· **Danger:**

Causes mild skin irritation.

(Cont'd. on page 3)

Safety Data Sheet

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 regulations

Printing date: May 02, 2017

Revision: May 02, 2017

Trade name: EkoBond

(Cont'd. of page 2)

Suspected of damaging fertility or the unborn child. Route of exposure: Inhalation.
May cause damage to organs through prolonged or repeated exposure. Route of exposure: Inhalation.
Danger of disturbed cardiac rhythm.
Danger of convulsion.
May be harmful if swallowed, in contact with skin or if inhaled.

- **Indication of any immediate medical attention and special treatment needed:**
Contains toluene, methanol. Consult literature for specific antidotes.
Medical supervision for at least 48 hours.
Do not administer preparations of the adrenalin-ephedrine-group.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray.
- **For safety reasons unsuitable extinguishing agents:** None.
- **Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.
- **Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.
- **Additional information:** Cool endangered receptacles with water spray.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Use respiratory protective device against the effects of fumes/dust/aerosol.
Ensure adequate ventilation.
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions**
Do not allow to enter sewers/ surface or ground water.
Inform respective authorities in case of seepage into water course or sewage system.
- **Methods and material for containment and cleaning up**
Absorb liquid components with liquid-binding material.
Send for recovery or disposal in suitable receptacles.
- **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

- **Handling**
- **Precautions for safe handling:**
Keep receptacles tightly sealed.

(Cont'd. on page 4)



Safety Data Sheet

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 regulations

Printing date: May 02, 2017

Revision: May 02, 2017

Trade name: EkoBond

(Cont'd. of page 3)

Use only in well ventilated areas.

Avoid splashes or spray in enclosed areas.

Keep out of reach of children.

· **Information about protection against explosions and fires:**

Keep respiratory protective device available.

· **Conditions for safe storage, including any incompatibilities**

· **Storage**

· **Requirements to be met by storerooms and receptacles:**

Use only receptacles specifically permitted for this substance/product.

Avoid storage near extreme heat, ignition sources or open flame.

· **Information about storage in one common storage facility:** Store away from foodstuffs.

· **Further information about storage conditions:** Store in cool, dry conditions in well sealed receptacles.

· **Specific end use(s)** No relevant information available.

8 Exposure controls/personal protection

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

108-88-3 toluene

PEL (USA)	Long-term value: 200 ppm Ceiling limit value: 300; 500* ppm *10-min peak per 8-hr shift
REL (USA)	Short-term value: 560 mg/m ³ , 150 ppm Long-term value: 375 mg/m ³ , 100 ppm
TLV (USA)	Long-term value: 75 mg/m ³ , 20 ppm BEI
EL (Canada)	Long-term value: 20 ppm R
EV (Canada)	Long-term value: 20 ppm
LMPE (Mexico)	Long-term value: 20 ppm A4, IBE

67-56-1 methanol

PEL (USA)	Long-term value: 260 mg/m ³ , 200 ppm
REL (USA)	Short-term value: 325 mg/m ³ , 250 ppm Long-term value: 260 mg/m ³ , 200 ppm Skin
TLV (USA)	Short-term value: 328 mg/m ³ , 250 ppm Long-term value: 262 mg/m ³ , 200 ppm Skin; BEI
EL (Canada)	Short-term value: 250 ppm Long-term value: 200 ppm Skin

(Cont'd. on page 5)



Safety Data Sheet

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 regulations

Printing date: May 02, 2017

Revision: May 02, 2017

Trade name: EkoBond

(Cont'd. of page 4)

EV (Canada)	Short-term value: 325 mg/m ³ , 250 ppm Long-term value: 260 mg/m ³ , 200 ppm Skin
LMPE (Mexico)	Short-term value: 250 ppm Long-term value: 200 ppm PIEL, IBE

· Ingredients with biological limit values:

108-88-3 toluene

BEI (USA)	0.02 mg/L Medium: blood Time: prior to last shift of workweek Parameter: Toluene
	0.03 mg/L Medium: urine Time: end of shift Parameter: Toluene
	0.3 mg/g creatinine Medium: urine Time: end of shift Parameter: o-Cresol with hydrolysis (background)

67-56-1 methanol

BEI (USA)	15 mg/L Medium: urine Time: end of shift Parameter: Methanol (background, nonspecific)
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· Exposure controls

· Personal protective equipment:

· General protective and hygienic measures:

- The usual precautionary measures for handling chemicals should be followed.
- 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.
- Pregnant women should strictly avoid inhalation or skin contact.
- Do not eat, drink, smoke or sniff while working.
- Clean skin thoroughly immediately after handling the product.

· Engineering controls: No relevant information available.

· Breathing equipment:

- Suitable respiratory protective device recommended.
- Use suitable respiratory protective device when aerosol or mist is formed.
- For spills, respiratory protection may be advisable.

(Cont'd. on page 6)

Safety Data Sheet

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 regulations

Printing date: May 02, 2017

Revision: May 02, 2017

Trade name: EkoBond

(Cont'd. of page 5)

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· **Eye protection:**



Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

· **Body protection:** Protective work clothing

· **Limitation and supervision of exposure into the environment**

No relevant information available.

· **Risk management measures** No relevant information available.

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **Appearance:**

Form: Liquid
Color: According to product specification

· **Odor:** Ammonia-like
 · **Odor threshold:** Not determined.

· **pH-value:** Alkaline
 · **Melting point/Melting range:** Not determined.
 · **Boiling point/Boiling range:** 64 °C (147 °F)

· **Flash point:** Not applicable - does not support sustained combustion.

· **Flammability (solid, gaseous):** Not applicable.

· **Auto-ignition temperature:** Not applicable.

· **Decomposition temperature:** Not determined.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits**

Lower: Not determined.
Upper: Not determined.

· **Vapor pressure:** Not determined.

· **Density:**

Relative density: 1.10
Vapor density: Not determined.
Evaporation rate: Not determined.

(Cont'd. on page 7)



Safety Data Sheet

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 regulations

Printing date: May 02, 2017

Revision: May 02, 2017

Trade name: EkoBond

(Cont'd. of page 6)

- **Solubility in / Miscibility with Water:** Fully miscible.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity**
 - Dynamic:** Not determined.
 - Kinematic:** Not determined.
- **Other information** No relevant information available.

10 Stability and reactivity

- **Reactivity:** No relevant information available.
- **Chemical stability:**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions**
Reacts with strong acids.
Reacts with catalysts, oxidizing agents and strong alkali.
Toxic fumes may be released if heated above the decomposition point.
- **Conditions to avoid** Excessive heat.
- **Incompatible materials** Oxidizers, strong bases, strong acids
- **Hazardous decomposition products**

Under fire conditions only:
Carbon monoxide and carbon dioxide
Toxic metal oxide smoke
Aldehyde
Hydrogen chloride (HCl)

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

108-88-3 toluene

Oral	LD50	5000 mg/kg (rat)
Dermal	LD50	12124 mg/kg (rabbit)
Inhalative	LC50/4h	5320 mg/l (mouse)

67-56-1 methanol

Oral	LD50	5628 mg/kg (rat)
Dermal	LD50	15800 mg/kg (rabbit)

1314-13-2 zinc oxide

Oral	LD50	> 5000 mg/kg (rat)
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(Cont'd. on page 8)



Safety Data Sheet

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 regulations

Printing date: May 02, 2017

Revision: May 02, 2017

Trade name: EkoBond

(Cont'd. of page 7)

- **Primary irritant effect:**
- **On the skin:** Causes mild skin irritation.
- **On the eye:**
Slight irritant effect on eyes.
Based on available data, the classification criteria are not met.
- **Sensitization:** Based on available data, the classification criteria are not met.

IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

NTP (National Toxicology Program):

None of the ingredients are listed.

OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

Probable route(s) of exposure:

Ingestion.
Inhalation.
Eye contact.
Skin contact.

Acute effects (acute toxicity, irritation and corrosivity):

May be harmful if swallowed.
May be harmful in contact with skin.
May be harmful if inhaled.
Causes mild skin irritation.

- **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.

- **Carcinogenicity:** Based on available data, the classification criteria are not met.

Reproductive toxicity:

May damage fertility or the unborn child. Route of exposure: Inhalation.
Suspected of damaging fertility or the unborn child. Route of exposure: Inhalation.

- **STOT-single exposure:** Based on available data, the classification criteria are not met.

STOT-repeated exposure:

May cause damage to organs through prolonged or repeated exposure. Route of exposure: Inhalation.
May cause damage to organs through prolonged or repeated exposure. Route of exposure: Inhalation.

- **Aspiration hazard:** Based on available data, the classification criteria are not met.

12 Ecological information

Toxicity

- **Aquatic toxicity** No relevant information available.

- **Persistence and degradability** The product is partially biodegradable. Significant residuals remain.

- **Bioaccumulative potential:** No relevant information available.

- **Mobility in soil:** No relevant information available.

Ecotoxicological effects:**Remark:**

Harmful to fish

Due to mechanical actions of the product (e.g. agglutinations), damages may occur.

The product is oxygen-consuming. The declared action may be partly caused by lack of oxygen.

(Cont'd. on page 9)



Safety Data Sheet

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 regulations

Printing date: May 02, 2017

Revision: May 02, 2017

Trade name: EkoBond

(Cont'd. of page 8)

· **Additional ecological information**

· **General notes:**

Do not allow product to reach ground water, water course or sewage system.

Harmful to aquatic organisms

Due to available data on eliminability/decomposition and bioaccumulation potential prolonged term damage of the environment can not be excluded.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects** No relevant information available.

13 Disposal considerations

· **Waste treatment methods**

· **Recommendation:**

Can be disposed of with household garbage after solidification following consultation with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

· **Uncleaned packagings**

· **Recommendation:** Disposal must be made according to official regulations.

· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

· **UN-Number**

· DOT, ADR, IMDG, IATA Not regulated.

· **UN proper shipping name**

· DOT, ADR, IMDG, IATA Not regulated.

· **Transport hazard class(es)**

· DOT, ADR, IMDG, IATA

· Class Not regulated.

· **Packing group**

· DOT, ADR, IMDG, IATA Not regulated.

· **Environmental hazards**

· **Marine pollutant:** No

· **Special precautions for user**

Not applicable.

(Cont'd. on page 10)



Safety Data Sheet

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 regulations

Printing date: May 02, 2017

Revision: May 02, 2017

Trade name: EkoBond

(Cont'd. of page 9)

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **United States (USA)**
- **SARA**

· **Section 302 (extremely hazardous substances):**

None of the ingredients are listed.

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

None of the ingredients are listed.

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

Substance / component not listed individually, but listed under family group as Zinc salts.

108-88-3	toluene
67-56-1	methanol
1314-13-2	zinc oxide

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

All ingredients are listed.

· **Proposition 65 (California)**

· **Chemicals known to cause cancer:**

None of the ingredients are listed.

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

108-88-3	toluene
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· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed.

· **Chemicals known to cause developmental toxicity:**

108-88-3	toluene
67-56-1	methanol

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency):**

108-88-3	toluene	II
1314-13-2	zinc oxide	D, I, II

· **IARC (International Agency for Research on Cancer):**

None of the ingredients are listed.

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

None of the ingredients are listed.

(Cont'd. on page 11)



Safety Data Sheet

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 regulations

Printing date: May 02, 2017

Revision: May 02, 2017

Trade name: EkoBond

(Cont'd. of page 10)

Canadian Domestic Substances List (DSL):

All ingredients are listed.

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.

· **Date of preparation / last revision** May 02, 2017 / -

· **Abbreviations and acronyms:**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bio-accumulable, Toxique

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids – Category 2

Acute Tox. 3: Acute toxicity – Category 3

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2B: Serious eye damage/eye irritation – Category 2B

Repr. 2: Reproductive toxicity – Category 2

STOT SE 1: Specific target organ toxicity (single exposure) – Category 1

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Asp. Tox. 1: Aspiration hazard – Category 1

· **Sources**

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sorinternet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaassen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

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