

Safety Data Sheet

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



Printing date: October 04, 2017

Revision: October 04, 2017

1 Identification

- **Product identifier**
- **Trade name:** EkoStrip
- **Other means of identification:** No other identifiers
- **Recommended use and restriction on use**
- **Recommended use:** Solvents
- **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**
Flam. Liq. 4 H227 Combustible liquid.
Acute Tox. 4 H332 Harmful if inhaled.
Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2A H319 Causes serious eye irritation.
Repr. 1B H360 May damage fertility or the unborn child. Route of exposure: Oral.
STOT SE 3 H335 May cause respiratory irritation.
- **Label elements**
- **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:**

GHS07 GHS08
- **Signal word:** Danger
- **Hazard statements:**
H227 Combustible liquid.
H332 Harmful if inhaled.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H360 May damage fertility or the unborn child. Route of exposure: Oral.
H335 May cause respiratory irritation.

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Precautionary statements:

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- P233 Keep container tightly closed.
- P261 Avoid breathing mist, vapors, or spray.
- P264 Wash thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P280 Wear protective gloves/protective clothing/eye protection.
- P302+P352 IF ON SKIN: Wash with plenty of soap and water.
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P312 Call a POISON CENTER/doctor if you feel unwell.
- P332+P313 If skin irritation occurs: Get medical advice/attention.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P370+P378 In case of fire: Use foam, powder, or carbon dioxide for extinction.
- P403+P235 Store in a well-ventilated place. Keep cool.
- 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:**

872-50-4	N-methyl-2-pyrrolidone ◆ Acute Tox. 3, H331 ◆ Repr. 1B, H360 ◆ Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335 Flam. Liq. 4, H227	40-60%
100-51-6	benzyl alcohol ◆ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Eye Irrit. 2A, H319	30-50%
763-69-9	ethyl 3-ethoxypropionate ◆ Flam. Liq. 3, H226	0.1-10%

Additional information:

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret.
 For the wording of the listed Hazard Statements refer to section 16.

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4 First-aid measures

Description of first aid measures**After inhalation:**

- Supply fresh air; consult doctor in case of complaints.
- Provide oxygen treatment if affected person has difficulty breathing.
- In case of irregular breathing or respiratory arrest provide artificial respiration.

After skin contact:

- Immediately wash with water and soap and rinse thoroughly.
- Seek medical treatment in case of complaints.

After eye contact:

- Remove contact lenses if worn.
- 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:

- Breathing difficulty
- Coughing
- Irritant to skin and mucous membranes.
- Causes eye irritation.
- May cause respiratory irritation.

Danger: May damage fertility or the unborn child. Route of exposure: Oral.**Indication of any immediate medical attention and special treatment needed:** Treat symptomatically.

5 Fire-fighting measures

Extinguishing media**Suitable extinguishing agents:**

- Carbon dioxide
- Fire-extinguishing powder
- Foam
- Water fog / haze
- Gaseous extinguishing agents

For safety reasons unsuitable extinguishing agents: Water stream.**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.
- Do not inhale explosion gases or combustion gases.
- Wear fully protective suit.

Additional information: Cool endangered containers with water fog.

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6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**

Use respiratory protective device against the effects of fumes/dust/aerosol.

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation.

Keep away from ignition sources.

· **Environmental precautions** Avoid release to the environment.

· **Methods and material for containment and cleaning up**

Absorb with non-combustible liquid-binding material (sand, diatomite, acid binders, universal binders).

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:**

Prevent formation of aerosols.

Avoid splashes or spray in enclosed areas.

Use only in well ventilated areas.

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

Combustible liquid.

Keep ignition sources away - Do not smoke.

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

· **Storage**

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

Store in cool, dry conditions in well sealed receptacles.

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

· **Information about storage in one common storage facility:**

Store away from foodstuffs.

Store away from oxidizing agents.

· **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:**

872-50-4 N-methyl-2-pyrrolidone

WEEL (USA)	Long-term value: 10 ppm Skin
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EV (Canada)	Long-term value: 400 mg/m ³
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100-51-6 benzyl alcohol

WEEL (USA) | Long-term value: 10 ppm

763-69-9 ethyl 3-ethoxypropionate

EV (Canada) | Long-term value: 300 mg/m³, 50 ppm

Ingredients with biological limit values:

872-50-4 N-methyl-2-pyrrolidone

BEI (USA)	100 mg/L
	Medium: urine
	Time: end of shift
	Parameter: 5-Hydroxy-N-methyl-2-pyrrolidone

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 ingestion.

Engineering controls: Provide adequate ventilation.

Breathing equipment: Suitable respiratory protective device recommended.

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

Body protection: Protective work clothing

Limitation and supervision of exposure into the environment

No relevant information available.

9 Physical and chemical properties

Information on basic physical and chemical properties

Appearance:

Form:	Liquid
Color:	Clear to straw color.
Odor:	Solvent-like

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· Odor threshold:	Not determined.
· pH-value:	Not determined.
· Melting point/Melting range:	Not determined.
· Boiling point/Boiling range:	101°C (213.8 °F)
· Flash point:	84.4°C (183.9 °F)
· Flammability (solid, gaseous):	Not applicable.
· Auto-ignition temperature:	Not determined.
· Decomposition temperature:	Not determined.
· Danger of explosion:	Not determined.
· Explosion limits Lower:	Not determined.
Upper:	Not determined.
· Oxidizing properties:	Not determined.
· Vapor pressure at 20°C (68 °F):	<0.07mmHg
· Density: Relative density:	Not determined.
Vapor density:	Not determined.
Evaporation rate:	Not determined.
· Solubility in / Miscibility with Water:	Not determined.
· 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:** Stable under normal temperatures and pressures.
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions**
Combustible liquid.
Used empty containers may contain product gases which form explosive mixtures with air.
Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomized.
Reacts with oxidizing agents.
- **Conditions to avoid**
Keep ignition sources away - Do not smoke.
Store away from oxidizing agents.

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- **Incompatible materials** No relevant information available.
- **Hazardous decomposition products** Carbon monoxide and carbon dioxide

11 Toxicological information

· Information on toxicological effects

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

872-50-4 N-methyl-2-pyrrolidone

Oral	LD50	4,150 mg/kg (rat)
Dermal	LD50	>5,000 mg/kg (rat)
Inhalative	LC50/4h	>5.1 mg/l (rat)

100-51-6 benzyl alcohol

Oral	LD50	1,230 mg/kg (rat)
Dermal	LD50	2,000 mg/kg (rabbit)

· Primary irritant effect:

- **On the skin:** Irritant to skin and mucous membranes.
- **On the eye:** Irritating effect.
- **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):

- Harmful if inhaled.
- Irritating to eyes, respiratory system and skin.

· **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: Oral.

· **STOT-single exposure:** May cause respiratory irritation.

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

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

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12 Ecological information

· **Toxicity**

· **Aquatic toxicity**

100-51-6 benzyl alcohol

LC50 | 460 mg/l (pimephales promelas)

· **Persistence and degradability** No relevant information available.

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

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

· **Additional ecological information**

· **General notes:** Avoid release to the environment.

· **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:**

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.

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

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· **Special precautions for user** Not applicable.

· **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):**

872-50-4 | N-methyl-2-pyrrolidone

· **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:**

None of the ingredients are listed.

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

None of the ingredients are listed.

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

872-50-4 | N-methyl-2-pyrrolidone

· **Carcinogenic categories**

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

None of the ingredients are listed.

· **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.

· **Canadian Domestic Substances List (DSL):**

All ingredients are listed.

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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.

· **Date of preparation / last revision** October 04, 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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bio-accumulable, Toxique

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety and Health

OSHA: Occupational Safety & Health Administration

Flam. Liq. 3: Flammable liquids – Category 3

Flam. Liq. 4: Flammable liquids – Category 4

Acute Tox. 4: Acute toxicity – Category 4

Acute Tox. 3: Acute toxicity – Category 3

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

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

Repr. 1B: Reproductive toxicity – Category 1B

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

· **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., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

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