Multi-Strip Advanced

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 1: Identification

1.1. Identification

Product form : Mixture

Product name : Multi-Strip Advanced

Product code : 657A

1.2. Recommended use and restrictions on use

No additional information available

1.3. Supplier

Sunnyside Corp
225 Carpenter Ave
Wheeling, IL 60090 - USA
T 800-323-8611 - F 847-541-9043
orders@sunnysidecorp.com - www.sunnysidecorp.com

1.4. Emergency telephone number

Country	Organization/Company	Address	Emergency number	Comment
United States	Chemtrec		1-800-424-9300	

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin corrosion/irritation Category 2 — Causes skin irritation
Serious eye damage/eye irritation Category 2 — Causes serious eye irritation

2.2. GHS Label elements, including precautionary statements

GHS-US labeling

Hazard pictograms (GHS-US) :

Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : Causes skin irritation
Causes serious eye irritation

Precautionary statements (GHS-US) : Wash hands, forearms and face thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
If on skin: Wash with plenty of water
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Specific treatment (see supplemental first aid instruction on this label)
If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
benzyl alcohol	(CAS-No.) 100-51-6	25 - 45	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332

Name	Product identifier	%	GHS-US classification
ethyl 3-ethoxypropionate	(CAS-No.) 763-69-9	10 - 25	Flam. Liq. 3, H226
dimethyl glutarate	(CAS-No.) 1119-40-0	< 10	Aquatic Acute 3, H402
dimethyl succinate	(CAS-No.) 106-65-0	< 10	Aquatic Acute 3, H402
dimethyl adipate	(CAS-No.) 627-93-0	< 10	Acute Tox. 4 (Dermal), H312 Aquatic Acute 3, H402
formic acid, conc≥90%, aqueous solutions	(CAS-No.) 64-18-6	< 10	Flam. Liq. 3, H226 Skin Corr. 1A, H314

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after skin contact : Irritation.

Symptoms/effects after eye contact : Eye irritation.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

benzyl alcohol (100-51-6)
Not applicable

dimethyl glutarate (1119-40-0)
Not applicable

dimethyl adipate (627-93-0)
Not applicable

ethyl 3-ethoxypropionate (763-69-9)
Not applicable

formic acid, conc≥90%, aqueous solutions (64-18-6)
Not applicable

dimethyl succinate (106-65-0)
Not applicable

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Color	:	Mixture contains one or more component(s) which have the following colour(s): Colourless Colourless to light yellow Off-white Pure substance: white Unpurified: coloured Light yellow to grey
Odor	:	There may be no odour warning properties, odour is subjective and inadequate to warn of overexposure. Mixture contains one or more component(s) which have the following odour: Fruity odour Aromatic odour Mild odour Sweet odour Odourless Pleasant odour Irritating/pungent odour Ether-like odour
Odor threshold	:	No data available
pH	:	No data available
Melting point	:	Not applicable
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Relative evaporation rate (butyl acetate=1)	:	No data available

Flammability (solid, gas)	:	Not applicable.
Vapor pressure	:	No data available
Relative vapor density at 20 °C	:	No data available
Relative density	:	No data available
Solubility	:	No data available
Log Pow	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity, kinematic	:	< 20 mm²/s
Viscosity, dynamic	:	No data available
Explosion limits	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	:	Not classified
Acute toxicity (dermal)	:	Not classified
Acute toxicity (inhalation)	:	Not classified

benzyl alcohol (100-51-6)	
LD50 oral rat	1620 mg/kg bw/day (Rat, Male, Experimental value, Oral)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit, Inconclusive, insufficient data, Dermal)
LC50 inhalation rat (mg/l)	> 4.178 mg/l air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male/female, Experimental value, Inhalation (aerosol))
ATE US (oral)	1620 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h

dimethyl adipate (627-93-0)	
LD50 oral rat	> 5000 mg/kg body weight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, 14 day(s), Rat, Female, Read-across, Oral)
LD50 dermal rabbit	> 1000 mg/kg body weight (Equivalent or similar to OECD 402, 24 h, Rabbit, Male/female, Experimental value, Dermal)
LC50 inhalation rat (mg/l)	> 11 mg/l (Equivalent or similar to OECD 403, 4 h, Rat, Male/female, Read-across, Inhalation (aerosol))
ATE US (dermal)	1100 mg/kg body weight

ethyl 3-ethoxypropionate (763-69-9)	
LD50 oral rat	5000 mg/kg (Rat, Oral)
LD50 dermal rabbit	4076 mg/kg (Rabbit, Dermal)
ATE US (oral)	5000 mg/kg body weight
ATE US (dermal)	4076 mg/kg body weight

dimethyl succinate (106-65-0)	
LD50 oral rat	6892 mg/kg (Rat, Female, Experimental value, Oral)
LD50 dermal rat	> 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male/female, Experimental value, Dermal)
ATE US (oral)	6892 mg/kg body weight

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Reproductive toxicity : Not classified
Specific target organ toxicity – single exposure : Not classified

Specific target organ toxicity – repeated exposure : Not classified

Aspiration hazard : Not classified
Viscosity, kinematic : < 20 mm²/s

Symptoms/effects after skin contact : Irritation.
Symptoms/effects after eye contact : Eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

benzyl alcohol (100-51-6)	
LC50 fish 1	460 mg/l (EPA OPP 72-1, 96 h, Pimephales promelas, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 Daphnia 1	230 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Fresh water, Experimental value, GLP)
ErC50 (algae)	770 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)

dimethyl glutarate (1119-40-0)	
LC50 fish 1	18 - 24 mg/l (96 h, Pimephales promelas)
EC50 Daphnia 1	122.1 - 163 mg/l (48 h, Daphnia magna)

dimethyl adipate (627-93-0)	
LC50 fish 1	18 - 24 ppm (EPA OTS 797.1400, 96 h, Pimephales promelas, Static system, Fresh water, Read-across)
EC50 Daphnia 1	72 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)

ethyl 3-ethoxypropionate (763-69-9)	
LC50 fish 1	143.63 mg/l (96 h, Salmo gairdneri, QSAR)
LC50 fish 2	149.83 mg/l (96 h, Lepomis macrochirus, QSAR)

dimethyl succinate (106-65-0)	
LC50 fish 1	50 - 100 mg/l (OECD 203: Fish, Acute Toxicity Test, 48 h, Brachydanio rerio, Semi-static system, Fresh water, Experimental value)

dimethyl succinate (106-65-0)	
EC50 Daphnia 1	> 100 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)
ErC50 (algae)	> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Growth rate)

12.2. Persistence and degradability

benzyl alcohol (100-51-6)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.6 g O_2/g substance
Chemical oxygen demand (COD)	2.4 g O_2/g substance
ThOD	2.5 g O_2/g substance

dimethyl glutarate (1119-40-0)	
Persistence and degradability	Biodegradability in water: no data available.

dimethyl adipate (627-93-0)	
Persistence and degradability	Readily biodegradable in water.
ThOD	1.747 g O_2/g substance

ethyl 3-ethoxypropionate (763-69-9)	
Persistence and degradability	Readily biodegradable in water.

formic acid, conc≥90%, aqueous solutions (64-18-6)	
Persistence and degradability	Contains readily biodegradable component(s).

dimethyl succinate (106-65-0)	
Persistence and degradability	Readily biodegradable in water. Inherently biodegradable.

12.3. Bioaccumulative potential

benzyl alcohol (100-51-6)	
Log Pow	1 - 1.1 (Experimental value, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

dimethyl glutarate (1119-40-0)	
BCF fish 1	<= 100 (Pisces, QSAR)
Log Pow	0.12 (QSAR)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

dimethyl adipate (627-93-0)	
Log Pow	1.4 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 22 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

ethyl 3-ethoxypropionate (763-69-9)	
Log Pow	1.25 (Calculated)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

formic acid, conc≥90%, aqueous solutions (64-18-6)	
Bioaccumulative potential	Does not contain bioaccumulative component(s).

dimethyl succinate (106-65-0)	
BCF fish 1	3.16 (BCFBAF v3.00, Pisces, Calculated value)
Log Pow	0.33 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 40 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

12.4. Mobility in soil

benzyl alcohol (100-51-6)	
Surface tension	39 mN/m (20 °C)
Ecology - soil	No (test)data on mobility of the substance available.

dimethyl adipate (627-93-0)	
Ecology - soil	No (test)data on mobility of the substance available.

ethyl 3-ethoxypropionate (763-69-9)	
Surface tension	0.066 N/m (20 °C, 1.1 g/l, OECD 115: Surface Tension of Aqueous Solutions)
Ecology - soil	No (test)data on mobility of the substance available.

formic acid, conc≥90%, aqueous solutions (64-18-6)	
Ecology - soil	Contains component(s) with potential for mobility in the soil.

dimethyl succinate (106-65-0)	
Log Koc	1 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Highly mobile in soil.

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : Non-Regulated
UN-No.(DOT) : Non-Regulated
Other information : No supplementary information available.

Transportation of Dangerous Goods

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

benzyl alcohol (100-51-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

ethyl 3-ethoxypropionate (763-69-9)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

dimethyl succinate (106-65-0)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

benzyl alcohol (100-51-6)
Listed on the Canadian DSL (Domestic Substances List)

ethyl 3-ethoxypropionate (763-69-9)
Listed on the Canadian DSL (Domestic Substances List)

dimethyl succinate (106-65-0)
Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations
No additional information available

National regulations
No additional information available

15.3. US State regulations

Component	State or local regulations
benzyl alcohol(100-51-6)	U.S. - Pennsylvania - RTK (Right to Know) List
dimethyl glutarate(1119-40-0)	
dimethyl adipate(627-93-0)	
ethyl 3-ethoxypropionate(763-69-9)	
formic acid, conc≥90%, aqueous solutions(64-18-6)	
dimethyl succinate(106-65-0)	

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Full text of H-phrases:

H226	Flammable liquid and vapour
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H332	Harmful if inhaled
H402	Harmful to aquatic life

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product