

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product form : Mixture
Trade name : Defy Wood Brightener

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Brightening Exterior Wood Surfaces
Use of the substance/mixture : The product is intended for professional use.

1.3. Details of the supplier of the safety data sheet

SaverSystems, Inc.
800 S. 7th Street
Richmond, 47374 - U.S.A.
T (765) 966-5084

1.4. Emergency telephone number

Chemtel : 1 (800) 255-3924 24/7

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****GHS-US classification**

Skin Corr. 1A H314
Eye Dam. 1 H318

2.2. Label elements**GHS-US labelling**

Hazard pictograms (GHS-US) :



GHS05

Signal word (GHS-US) : Danger
Hazard statements (GHS-US) : H314 - Causes severe skin burns and eye damage
Precautionary statements (GHS-US) : P260 - Do not breathe dust, fume, mist, spray, vapours
P264 - Wash hands thoroughly after handling
P280 - Wear eye protection, protective clothing, face protection, protective gloves
P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting
P303+P361+P353 - IF ON SKIN (or hair): Remove off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340 - IF INHALED: remove to fresh air and keep at rest in a position 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
P363 - Wash contaminated clothing before reuse
P405 - Store away from children
P501 - Dispose of contents/container to comply with applicable local, national and international regulation.

2.3. Other hazards

Other hazards which do not result in classification : Surface will become slippery when wet or damp.

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients**3.1. Substance**

Not applicable

Full text of H-phrases: see section 16

Defy Wood Brightener

Safety Data Sheet

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

3.2. Mixture

Name	Product identifier	%	GHS-US classification
Ethanedioic acid, dihydrate	(CAS No) 6153-56-6	5-10	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Corr. 1B, H314 Eye Dam. 1, H318
hydroxyethylcellulose	(CAS No) 9004-62-0	0.1-0.5	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Ensure fresh air breathing. Allow the victim to rest. In case of breathing difficulties, administer oxygen. Seek medical attention immediately.
- First-aid measures after skin contact : Rinse using water. Remove contaminated clothes. Wash skin thoroughly with mild soap and water. If skin irritation persists, seek medical attention.
- First-aid measures after eye contact : Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention immediately.
- First-aid measures after ingestion : If swallowed, rinse mouth with water (only if the person is conscious). Do NOT induce vomiting unless directed to do so by medical personnel. Immediately call a POISON CENTER or doctor/physician. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : Causes severe skin burns and eye damage.
- Symptoms/injuries after inhalation : Overexposure may cause : Irritating to the nose, throat, and respiratory tract.
- Symptoms/injuries after skin contact : Causes severe skin burns and eye damage.
- Symptoms/injuries after eye contact : Causes serious eye damage. Eye contact with concentrated solutions may cause severe eye damage followed by loss of sight.
- Symptoms/injuries after ingestion : may be harmful if swallowed.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protective equipment for firefighters : Do not enter fire area without proper protective equipment, including respiratory protection. Wear a self contained breathing apparatus.
- Other information : On burning: release of carbon monoxide - carbon dioxide. Avoid dust clouds in combination with static electricity.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Ensure adequate ventilation. For exterior use only. Stop leak if safe to do so. Surface will become slippery when wet or damp. Keep away from sources of ignition - No smoking.

6.1.1. For non-emergency personnel

- Protective equipment : Use personal protective equipment as required. For further information refer to section 8: "Exposure controls/personal protection".
- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.

Defy Wood Brightener

Safety Data Sheet

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. This product is acidic. Harmful effect due to pH shift. Prevent contamination of soil, drains and surface waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. Dispose of contents/container to comply with applicable local, national and international regulations.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Surface will become slippery when wet or damp. Reacts with chlorine bleach: release of (highly) toxic gases/vapours.

Precautions for safe handling : Keep out of reach of children. Never add water to this product. For exterior use only. For use by professional applicators only. Work in a well-ventilated area. Ensure adequate ventilation. Use personal protective equipment as required. Personal protective equipment should be selected based upon the conditions under which this product is handled or used. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not mix with other cleaners or chlorine bleach.

Hygiene measures : Do not eat, drink or smoke when using this product. Avoid contact with skin and eyes. Use good personal hygiene practices. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : A washing facility/water for eye and skin cleaning purposes should be present. Use only antistatically equipped (spark-free) tools.

Storage conditions : Keep locked up and out of reach of children. Keep container closed when not in use. Keep only in the original container in a cool well ventilated place. Store away from freezing (avoid freezing during storage). It is possible that in the head space of sealed containers, especially in the case of thermal development, vapours of solvent cleaners may accumulate. Flames and sources of ignition must be kept well away. Store containers in an upright manner to prevent leakage.

Incompatible materials : Strong oxidizing agents. Sodium chlorite. Silver.

Heat and ignition sources : Excessive heat. Remove all sources of ignition.

Storage area : Store in dry, cool, well-ventilated area. Smoking, eating and drinking should be prohibited in areas of storage and use.

Special rules on packaging : Correctly labelled.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls : Ensure adequate ventilation. A washing facility/water for eye and skin cleaning purposes should be present.

Personal protective equipment : Avoid all unnecessary exposure. The following pictograms represent the minimum requirements for personal protective equipment. Gloves. Protective clothing. Protective goggles. Personal protective equipment should be selected based upon the conditions under which this product is handled or used.



Hand protection : Wear protective gloves. Use gloves constructed of chemical resistant materials such as heavy nitrile rubber if frequent or prolonged contact is expected.

Eye protection : Wear chemical splash goggle.

Defy Wood Brightener

Safety Data Sheet

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Skin and body protection	: Wear suitable protective clothing. Boots.
Respiratory protection	: Wear suitable respiratory equipment. Protection factors vary depending upon the type of respirator used.
Environmental exposure controls	: Avoid discharge to the environment.
Other information	: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Water thin liquid.
Colour	: Clear to cloudy
odour	: Slight detergent odor
Odour threshold	: No data available
pH	: 1
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No data available
Freezing point	: < 0 °C (< 32 ° F)
Boiling point	: > 100 °C (> 212 ° F)
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: 15 mm Hg (104 °C)
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 0,064 g/cm ³ (8.55 lb/gal)
Solubility	: Water: completely soluble
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable at normal temperatures and pressures.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Extremely high or low temperatures. Avoid Freezing. Avoid ignition sources. Avoid static electricity discharges.

10.5. Incompatible materials

Strong oxidizers. Sodium chlorite. Silver.

10.6. Hazardous decomposition products

Hazardous decomposition products may be released during prolonged heating like smokes, carbon monoxide and dioxide.

Defy Wood Brightener

Safety Data Sheet

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Ethanedioic acid, dihydrate (6153-56-6)	
LD50 oral rat	375 mg/kg
LD50 dermal rabbit	20000 mg/kg
ATE (oral)	375,000 mg/kg bodyweight
ATE (dermal)	1100,000 mg/kg bodyweight

Skin corrosion/irritation : Causes severe skin burns and eye damage.
pH: 1

Serious eye damage/irritation : Causes serious eye damage.
pH: 1

Respiratory or skin sensitisation : 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

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

Symptoms/injuries after inhalation : Overexposure may cause : Irritating to the nose, throat, and respiratory tract.

Symptoms/injuries after skin contact : Causes severe skin burns and eye damage.

Symptoms/injuries after eye contact : Causes serious eye damage. Eye contact with concentrated solutions may cause severe eye damage followed by loss of sight.

Symptoms/injuries after ingestion : may be harmful if swallowed.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Do not contaminate water with the product or its container (Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads).

12.2. Persistence and degradability

Defy Wood Brightener	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Defy Wood Brightener	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. It is the responsibility of the user to determine if disposal material is hazardous according to federal, state and local regulations. Do not pressurize, cut, weld, braze solder, drill, grind, or expose containers to flames, sparks, heat, or other potential ignition sources.

Additional information : Empty container retains product residue. Do not re-use empty containers.

Defy Wood Brightener

Safety Data Sheet

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Ecology - waste materials : Avoid release to the environment. This product is acidic. Harmful effect due to pH shift.

SECTION 14: Transport information

In accordance with DOT

No dangerous good in sense of transport regulations

Additional information

Other information : No supplementary information available.

ADR

Transport document description :

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

hydroxyethylcellulose (9004-62-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

hydroxyethylcellulose (9004-62-0)

Listed on the Canadian DSL (Domestic Substances List) inventory.

WHMIS Classification

Uncontrolled product according to WHMIS classification criteria

Ethanedioic acid, dihydrate (6153-56-6)

WHMIS Classification

Class E - Corrosive Material

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC or 1999/45/EC

No additional information available

15.2.2. National regulations

hydroxyethylcellulose (9004-62-0)

Listed on the AICS (the Australian Inventory of Chemical Substances)
Listed on Inventory of Existing Chemical Substances (IECSC)
Listed on the Japanese ENCS (Existing & New Chemicals Substances) inventory.
Listed on the Korean ECL (Existing Chemical List) inventory.
Listed on New Zealand - Inventory of Chemicals (NZIoC)
Listed on Inventory of Chemicals and Chemical Substances (PICCS)

Ethanedioic acid, dihydrate (6153-56-6)

Listed on the AICS (the Australian Inventory of Chemical Substances)
Listed on Inventory of Existing Chemical Substances (IECSC)
Listed on the Japanese ENCS (Existing & New Chemicals Substances) inventory.
Listed on New Zealand - Inventory of Chemicals (NZIoC)
Listed on Inventory of Chemicals and Chemical Substances (PICCS)
Poisonous and Deleterious Substances Control Law

Defy Wood Brightener

Safety Data Sheet

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

15.3. US State regulations

No additional information available

SECTION 16: Other information

Other information : None.

Full text of H-phrases: see section 16:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H335	May cause respiratory irritation

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