

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

Product form : Mixture
Trade name : Defy Exterior Wood Stain Stripper

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

Use of the substance/mixture : Stripping 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**

Met. Corr. 1 H290
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) : H290 - May be corrosive to metals
H314 - Causes severe skin burns and eye damage
Precautionary statements (GHS-US) : P234 - Keep only in original container
P260 - Do not breathe dust, fume, mist, spray, vapours
P264 - Wash hands thoroughly after handling
P280 - Wear eye protection, protective clothing, protective gloves
P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting
P303+P361+P353 - IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower
P304+P340 - IF INHALED: remove victim 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
P390 - Absorb spillage to prevent material damage
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

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SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

Full text of H-phrases: see section 16

3.2. Mixture

Name	Product identifier	%	GHS-US classification
Sodium hydroxide	(CAS No) 1310-73-2	10-15	Acute Tox. 4 (Dermal), H312 Skin Corr. 1A, H314 Eye Dam. 1, H318
Sodium metasilicate	(CAS No) 6834-92-0	1-2	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 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.

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	: Hazardous decomposition products may be released during prolonged heating like smokes, carbon monoxide and dioxide, SiO ₂ .

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. Spills of this product present a serious slipping hazard.

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".

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Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Prevent contamination of soil, drains and surface waters. Contains sodium hydroxide and sodium metasilicate. This product is alkaline (high pH) and may raise the pH of surface waters with low buffering capacity. 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 : Special danger of slipping by leaking/spilling product. Contains sodium hydroxide and sodium metasilicate. This product is alkaline (high pH) and may raise the pH of surface waters with low buffering capacity.

Precautions for safe handling : Keep out of reach of children. For exterior use 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 use with incompatible materials such as water, strong oxidizing agents, strong reducing agents, strong acids and strong alkalis. Metals.

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). Store containers in an upright manner to prevent leakage.

Incompatible materials : Strong acids, bases. Strong oxidizing agents. Strong reducing agents. Aluminum and other light metals and their alloys. On contact with ordinary metals (steel, galvanized, aluminium) corrosion may occur and generate highly flammable hydrogen gas.

Heat and ignition sources : Excessive heat.

Storage area : Store in dry, cool, well-ventilated area. Smoking, eating and drinking should be prohibited in areas of storage and use. Store in original container or corrosive resistant and/or lined container.

Special rules on packaging : Correctly labelled.

Packaging materials : Keep only in the original container. Do not use aluminum, tin or zinc containers.

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.

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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. Nitrile-rubber protective gloves.

Eye protection : Wear chemical splash goggle.

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 : Slightly cloudy to clear.

Odour : Slight sweet odour.

Odour threshold : No data available

pH : 13

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 : No data available

Relative vapour density at 20 °C : No data available

Relative density : No data available

Density : 1,06 g/cm³ (8.9 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.

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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

Store away from strong oxidizers, strong bases, strong acids. Strong reducing agents. On contact with ordinary metals (steel, galvanized, aluminium) corrosion may occur and generate highly flammable hydrogen gas.

10.6. Hazardous decomposition products

Hazardous decomposition products may be released during prolonged heating like smokes, carbon monoxide and dioxide, SiO₂.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Sodium hydroxide (1310-73-2)	
LD50 dermal rabbit	1350 mg/kg
ATE (dermal)	1350,000 mg/kg bodyweight

Sodium metasilicate (6834-92-0)	
LD50 oral rat	600 mg/kg
ATE (oral)	600,000 mg/kg bodyweight

Skin corrosion/irritation	: Causes severe skin burns and eye damage. pH: 13
Serious eye damage/irritation	: Causes serious eye damage. pH: 13
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). Contains sodium hydroxide and sodium metasilicate. This product is alkaline (high pH) and may raise the pH of surface waters with low buffering capacity. High concentration in receiving water will injure aquatic life by pH effect.

Sodium hydroxide (1310-73-2)	
LC50 fishes 1	45,4 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])

Sodium metasilicate (6834-92-0)	
LC50 fishes 1	210 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [semi-static])
EC50 Daphnia 1	216 mg/l (Exposure time: 96 h - Species: Daphnia magna)

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Sodium metasilicate (6834-92-0)	
LC50 fish 2	210 mg/l (Exposure time: 96 h - Species: Brachydanio rerio)

12.2. Persistence and degradability

Defy Exterior Wood Stain Stripper	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Defy Exterior Wood Stain Stripper	
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.
- 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

- Transport document description : UN3266 Corrosive liquid, basic, inorganic, n.o.s. (Sodium metasilicate), 8, II
- UN-No.(DOT) : 3266
- DOT NA no. : UN3266
- DOT Proper Shipping Name : Corrosive liquid, basic, inorganic, n.o.s.
Sodium metasilicate
- Department of Transportation (DOT) Hazard Classes : 8 - Class 8 - Corrosive material 49 CFR 173.136
- Hazard labels (DOT) : 8 - Corrosive
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- DOT Symbols : G - Identifies PSN requiring a technical name
- Packing group (DOT) : II - Medium Danger
- DOT Special Provisions (49 CFR 172.102) : B2 - MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks are not authorized.
IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.
T11 - 6 178.274(d)(2) Normal..... 178.275(d)(3)
TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.
TP27 - A portable tank having a minimum test pressure of 4 bar (400 kPa) may be used provided the calculated test pressure is 4 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.
- DOT Packaging Exceptions (49 CFR 173.xxx) : 154
- DOT Packaging Non Bulk (49 CFR 173.xxx) : 202

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DOT Packaging Bulk (49 CFR 173.xxx)	: 242
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 1 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 30 L
DOT Vessel Stowage Location	: B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.
DOT Vessel Stowage Other	: 40 - Stow "clear of living quarters", 52 - Stow "separated from" acids

Additional information

Other information : No supplementary information available.

ADR

Transport document description : No additional information available

Transport by sea

Class (IMDG) : 8 - Corrosive substances

Air transport

Class (IATA) : 8 - Corrosives

SECTION 15: Regulatory information

15.1. US Federal regulations

Sodium hydroxide (1310-73-2)

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

Sodium metasilicate (6834-92-0)

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

15.2. International regulations

CANADA

Sodium hydroxide (1310-73-2)

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

WHMIS Classification	Class E - Corrosive Material
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Sodium metasilicate (6834-92-0)

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

WHMIS Classification	Class E - Corrosive Material
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EU-Regulations

Sodium hydroxide (1310-73-2)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) substances.

Sodium metasilicate (6834-92-0)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) substances.

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

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

Not classified

15.2.2. National regulations

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Sodium hydroxide (1310-73-2)

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)
Poisonous and Deleterious Substances Control Law
Listed on the Canadian Ingredient Disclosure List

Sodium metasilicate (6834-92-0)

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)
Listed on the Canadian Ingredient Disclosure List

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
Met. Corr. 1	Corrosive to metals, Category 1
Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Corr. 1B	Skin corrosion/irritation Category 1B
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H290	May be corrosive to metals
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
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