

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Name : Defy Composite Deck Cleaner

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Oxygen bleaching and cleaning agent for wood
Restrictions on use : Any use not specified

1.3. Supplier

SaverSystems
800 7th Street
Richmond, Indiana 47374
USA
T 800-860-6327
www.saversystems.com

1.4. Emergency telephone number

Emergency number : ChemTel LLC
(800)255-3924 (North America)
+1 (813)248-0585 (International)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Oxidizing solids Category 3	H272	May intensify fire; oxidizer
Acute toxicity (oral) Category 4	H302	Harmful if swallowed
Skin corrosion/irritation Category 1B	H314	Causes severe skin burns and eye damage
Serious eye damage/eye irritation Category 1	H318	Causes serious eye damage

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS) :



Signal word (GHS) :

Danger

Hazard statements (GHS) :

H272 - May intensify fire; oxidizer
H302 - Harmful if swallowed
H314 - Causes severe skin burns and eye damage
H318 - Causes serious eye damage

Precautionary statements (GHS) :

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P220 - Keep/Store away from incompatible materials.
P221 - Take any precaution to avoid mixing with combustible materials
P260 - Do not breathe dust.
P264 - Wash hands, forearms and face thoroughly after handling.

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P270 - Do not eat, drink or smoke when using this product.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell.
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting.
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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.
P310 - Immediately call a poison center or doctor.
P330 - Rinse mouth.
P363 - Wash contaminated clothing before reuse.
P370+P378 - In case of fire: Use water, fog to extinguish.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Sodium percarbonate	CAS-No.: 15630-89-4	75-80	Ox. Sol. 3, H272 Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318
disodium metasilicate	CAS-No.: 6834-92-0	5-10	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335
tetrasodium pyrophosphate	CAS-No.: 7722-88-5	1 – 5	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

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 victim to fresh air and keep at rest in a position comfortable for breathing.
First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a poison center or doctor/physician.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.

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First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.

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

Symptoms/effects : Causes severe skin burns and eye damage.
Symptoms/effects after ingestion : Harmful if swallowed.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically. All treatments should be based on observed signs and symptoms of distress in the patient.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water. Water fog.

5.2. Specific hazards arising from the chemical

Fire hazard : May intensify fire; oxidizer. Contact with combustible material may cause fire.
Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.
Hazardous decomposition products in case of fire : Oxygen :Oxygen released in thermal decomposition may support combustion.

5.3. Special protective equipment and precautions for fire-fighters

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. Fight fire remotely due to the risk of explosion.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : No open flames. No smoking.

6.1.1. For non-emergency personnel

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.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Treat recovered material as described in the section "Disposal considerations". Sweep up spilled material without making dust. Never return spills in original containers for possible later re-use.

6.4. Reference to other sections

Section 13: disposal information. Section 8: personal protective equipment.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	: Hazardous waste due to potential risk of explosion.
Precautions for safe handling	: Avoid dust formation. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Hygiene measures	: Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Keep container closed when not in use. Keep in fireproof place. Keep only in the original container in a cool, well-ventilated place away from combustible materials.
Heat-ignition	: Keep away from heat, sparks and flame.
Packaging materials	: Stainless steel. Polyethylene. Paper + PE coating.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Defy Composite Deck Cleaner	
No additional information available	
disodium metasilicate (6834-92-0)	
No additional information available	
Sodium percarbonate (15630-89-4)	
No additional information available	
tetrasodium pyrophosphate (7722-88-5)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH TWA (mg/m ³)	5 mg/m ³
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL (TWA)	5 mg/m ³

8.2. Appropriate engineering controls

Appropriate engineering controls	: Use only outdoors or in a well-ventilated area.
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8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:
Wear suitable protective clothing and gloves. PVC. neoprene/natural rubber
Eye protection:
Chemical goggles
Skin and body protection:
Wear suitable protective clothing

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Respiratory protection:

Industrial and professional. Perform risk assessment prior to use. Appropriate dust or mist respirator should be used if airborne particles are generated when handling this material

Personal protective equipment symbol(s):



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	: Solid
Appearance	: White solid.
Color	: White
Odor	: Odorless
Odor threshold	: No data available
pH	: No data available
pH solution	: 10.4 – 10.6 (10.1) g/l
Melting point	: No data available
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)	: Non flammable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Density	: 950 – 1200 kg/m ³
Solubility	: Water: 150 g/l
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available.
Oxidizing properties	: May intensify fire; oxidizer.

9.2. Other information

SADT : > 55 °C (131 F) 50 kg

SECTION 10: Stability and reactivity

10.1. Reactivity

Decomposes when moist. Decomposes on heating. Potential for exothermic hazard.

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10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7). Risk of explosion if heated under confinement. May cause or intensify fire; oxidizer.

10.3. Possibility of hazardous reactions

Contact with combustible material may cause fire. No contact with flammable substances. May cause fire or explosion; strong oxidizer.

10.4. Conditions to avoid

Do not allow water (or moist air) contact with this material. Heat.

10.5. Incompatible materials

Water. Acids. Bases. Heavy metals (Salts). Reducing agents. Organic materials. Flammable materials. combustible materials.

10.6. Hazardous decomposition products

Oxygen.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Defy Composite Deck Cleaner	
ATE (oral)	539.55 mg/kg body weight
disodium metasilicate (6834-92-0)	
LD50 Oral rat	1153 mg/kg
LD50 Dermal rat	> 5000 mg/kg
LC50 Inhalation rat	> 2.06 mg/l air Animal: rat, Guideline: EPA OPPTS 870.1300 (Acute inhalation toxicity)
ATE (oral)	1153 mg/kg body weight
Sodium percarbonate (15630-89-4)	
ATE (oral)	500 mg/kg body weight
tetrasodium pyrophosphate (7722-88-5)	
LD50 Oral rat	> 300 (300 – 2000) mg/kg
LD50 Dermal rabbit	> 2000 mg/kg No mortality observed
LC50 Inhalation rat	> 0.58 mg/l/4h
ATE (oral)	300 mg/kg body weight

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

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NOAEL (animal/male, F0/P)	> 159 mg/kg body weight Repeated exposure- rat. According to a standardized method, no embryotoxic or teratogenic effects have been observed.
NOAEL (animal/female, F0/P)	> 159 mg/kg body weight Repeated exposure- rat. According to a standardized method, no embryotoxic or teratogenic effects have been observed.

STOT-single exposure : Not classified

disodium metasilicate (6834-92-0)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified

disodium metasilicate (6834-92-0)	
NOAEL (oral,rat,90 days)	227 – 237 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)

Aspiration hazard : Not classified
Viscosity, kinematic : No data available
Likely routes of exposure : Skin and eye contact. Inhalation.
Symptoms/effects : Causes severe skin burns and eye damage.
Symptoms/effects after ingestion : Harmful if swallowed.

SECTION 12: Ecological information

12.1. Toxicity

disodium metasilicate (6834-92-0)	
LC50 fish 1	2320 mg/l Gambusia affinis
EC50 crustacea	1700 mg/l
LC50 - Fish [2]	210 mg/l Brachydanio rerio

tetrasodium pyrophosphate (7722-88-5)	
LC50 fish 1	> 100 mg/l 96 h

12.2. Persistence and degradability

Defy Composite Deck Cleaner	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Defy Composite Deck Cleaner	
Bioaccumulative potential	Not established.

disodium metasilicate (6834-92-0)	
Bioaccumulative potential	Not expected to bioaccumulate.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : Avoid release to the environment.

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SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dilute with water. Neutralize prior to disposal (pH between 5.5 and 8.5).
Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT

14.1. UN number

DOT NA No : UN3084

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Corrosive solids, oxidizing, n.o.s. (sodium metasilicate, sodium percarbonate)

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : 8 (5.1)
Hazard labels (DOT) : 8, 5.1



14.4. Packing group

Packing group (DOT) : II

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

DOT

UN-No.(DOT) : UN3084
DOT Special Provisions (49 CFR 172.102) : IB6 - Authorized IBCs: Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2). Additional Requirement: Composite IBCs 11HZ2 and 21HZ2 may not be used when the hazardous materials being transported may become liquid during transport.
IP2 - When IBCs other than metal or rigid plastics IBCs are used, they must be offered for transportation in a closed freight container or a closed transport vehicle.
T3 - 2.65 178.274(d)(2) Normal..... 178.275(d)(2)
TP33 - The portable tank instruction assigned for this substance applies for granular and powdered solids and for solids which are filled and discharged at temperatures above their melting point which are cooled and transported as a solid mass. Solid substances transported or offered for transport above their melting point are authorized for transportation in portable tanks conforming to the provisions of portable tank instruction T4 for solid substances of packing group III or T7 for solid substances of packing group II, unless a tank with more stringent requirements for minimum shell thickness, maximum allowable working pressure, pressure-relief devices or bottom outlets are assigned in which case the more stringent tank instruction and special provisions shall apply. Filling limits must be in accordance with portable tank special provision TP3. Solids meeting the definition of an elevated temperature material must be transported in accordance with the applicable requirements of this subchapter.

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DOT Packaging Exceptions (49 CFR 173.xxx)	: None
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 212
DOT Packaging Bulk (49 CFR 173.xxx)	: 242
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 15 kg
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 50 kg
DOT Vessel Stowage Location	: C - The material must be stowed "on deck only" on a cargo vessel and on a passenger vessel.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

United States Environmental Protection Agency Toxic Substances Control Act (TSCA): Consult the supplier for further information

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

CANADA

disodium metasilicate (6834-92-0)

Listed on the Canadian DSL (Domestic Substances List)

tetrasodium pyrophosphate (7722-88-5)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

disodium metasilicate (6834-92-0)

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

tetrasodium pyrophosphate (7722-88-5)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)- Directive 79/831/EEC, sixth Amendment of Directive 67/548/EEC (dangerous substances)

National regulations

disodium metasilicate (6834-92-0)

Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on Taiwan National Chemical Inventory
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Chinese Catalog of Hazardous Chemicals.
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on the Japanese ENCS (Existing New Chemical Substances) inventory
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on KECL/KECI (Korean Existing Chemicals Inventory)

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tetrasodium pyrophosphate (7722-88-5)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on Taiwan National Chemical Inventory
Listed on the Inventory of Existing Chemical Substances Produced or Imported in China (IECSC).
Listed on the Japanese ENCS (Existing New Chemical Substances) inventory
Listed on KECL/KECI (Korean Existing Chemicals Inventory)

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm.

Component	State or local regulations
tetrasodium pyrophosphate (7722-88-5)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances

SECTION 16: Other information

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

Revision date : 12/03/2021
Other information : None.

Full text of H-phrases	
H272	May intensify fire; oxidizer
H290	May be corrosive to metals
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H335	May cause respiratory irritation

Safety Data Sheet (SDS), USA

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.