

SECTION 1: Identification

1.1. Identification

Product form : Mixture
 Product name : Defeat
 Product code : 4340-0340

1.2. Recommended use and restrictions on use

No additional information available

1.3. Supplier

ProActive Solutions USA, LLC
 301 Bridge Street
 Green Bay, WI 54303 - United States of America
 T 920-437+8658 - F 920-437+4006
www.proactivesolutionsusa.com

1.4. Emergency telephone number

Emergency number : 800-424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Corrosive to metals Category 1	H290	May be corrosive to metals
Skin corrosion/irritation Category 1A	H314	Causes severe skin burns and eye damage
Serious eye damage/eye irritation Category 1	H318	Causes serious eye damage
Hazardous to the aquatic environment - Acute Hazard Category 1	H400	Very toxic to aquatic life
Hazardous to the aquatic environment - Chronic Hazard Category 2	H411	Toxic to aquatic life with long lasting effects

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

H290 - May be corrosive to metals
 H314 - Causes severe skin burns and eye damage
 H318 - Causes serious eye damage
 H400 - Very toxic to aquatic life
 H411 - Toxic to aquatic life with long lasting effects

Precautionary statements (GHS US) :

P234 - Keep only in original container.
 P260 - Do not breathe dust/fume/gas/mist/vapors/spray.
 P264 - Wash hands, forearms and face thoroughly after handling.
 P273 - Avoid release to the environment.
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.
 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
 P321 - Specific treatment (see supplemental first aid instruction on this label)

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P363 - Wash contaminated clothing before reuse.
P390 - Absorb spillage to prevent material-damage.
P391 - Collect spillage.
P405 - Store locked up.
P406 - Store in corrosive resistant container with a resistant inner liner.
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 US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Sodium Hydroxide	(CAS-No.) 1310-73-2	25 - 50	Met. Corr. 1, H290 Skin Corr. 1A, H314 Eye Dam. 1, H318 Aquatic Acute 3, H402
Sodium Dichloroisocyanurate, Dihydrate	(CAS-No.) 51580-86-0	5 - 10	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Sodium Tripoly LD (STPP)	(CAS-No.) 7758-29-4	5 - 10	Eye Dam. 1, H318
Sodium Metasilicate Pentahydrate	(CAS-No.) 10213-79-3	5 - 10	Skin Corr. 1B, H314 STOT SE 3, H335

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 general : Call a physician immediately.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Call a physician immediately.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately.

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

Symptoms/effects after skin contact : Burns.
Symptoms/effects after eye contact : Serious damage to eyes.
Symptoms/effects after ingestion : Burns.

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.

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.

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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. Do not breathe dust/fume/gas/mist/vapors/spray.

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".

Emergency procedures : Acting cautiously, small accidental spills should be carefully flushed with water.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Mechanically recover the product.

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. Do not breathe dust/fume/gas/mist/vapors/spray. 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 corrosive resistant container with a resistant inner liner. Keep only in original container. Store locked up. Store in a well-ventilated place. Keep cool.

Incompatible materials : Metals.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Sodium Tripoly LD (STPP) (7758-29-4)

Not applicable

Sodium Hydroxide (1310-73-2)

ACGIH	Local name	Sodium hydroxide
ACGIH	ACGIH Ceiling (mg/m ³)	2 mg/m ³
ACGIH	Remark (ACGIH)	URT, eye, & skin irr
ACGIH	Regulatory reference	ACGIH 2017
OSHA	OSHA PEL (TWA) (mg/m ³)	2 mg/m ³
OSHA	Regulatory reference (US-OSHA)	OSHA

Sodium Dichloroisocyanurate, Dihydrate (51580-86-0)

Not applicable

Sodium Metasilicate Pentahydrate (10213-79-3)

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.

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8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Gloves. Safety glasses. In case of dust production: dustproof clothing.

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	: Solid
Appearance	: White crystal flakes or powder.
Color	: white
Odor	: chlorine-like
Odor threshold	: No data available
pH	: No data available
pH solution	: 12 (1 oz./gal)
Melting point	: No data available
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
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	: Not applicable
Solubility	: completely soluble.
Log Pow	: No data available
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available
Explosion limits	: Not applicable
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.

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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

Avoid contact with acid materials, reactive metals.

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 : Not classified

Sodium Tripoly LD (STPP) (7758-29-4)	
LD50 oral rat	> 2000 mg/kg (Rat)
LD50 dermal rabbit	> 4640 mg/kg (Rabbit)

Sodium Dichloroisocyanurate, Dihydrate (51580-86-0)	
LD50 oral rat	1671 mg/kg body weight (EPA OPP 81-1: Acute Oral Toxicity, Rat, Male/female, Experimental value)
LD50 dermal rat	> 5000 mg/kg (EPA OPP 81-2, Rat, Male/female, Experimental value)
LC50 inhalation rat (mg/l)	0.27 - 1.17 mg/l (Equivalent or similar to OECD 403, 4 h, Rat, Male/female, Experimental value)
ATE US (oral)	1671 mg/kg body weight
ATE US (vapors)	0.27 mg/l/4h
ATE US (dust, mist)	0.27 mg/l/4h

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

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

Specific target organ toxicity – single exposure : Not classified

Specific target organ toxicity – repeated exposure : Not classified

Aspiration hazard : Not classified

Symptoms/effects after skin contact : Burns.

Symptoms/effects after eye contact : Serious damage to eyes.

Symptoms/effects after ingestion : Burns.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Toxic to aquatic life with long lasting effects. Very toxic to aquatic life.

Sodium Tripoly LD (STPP) (7758-29-4)	
LC50 fish 1	1650 mg/l (48 h, Leuciscus idus)
EC50 Daphnia 1	1089 mg/l (505 h, Daphnia magna)

Sodium Hydroxide (1310-73-2)	
LC50 fish 1	45.4 mg/l (Other, 96 h, Salmo gairdneri, Static system, Fresh water, Experimental value)

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Sodium Hydroxide (1310-73-2)	
EC50 Daphnia 1	40.4 mg/l (Other, 48 h, Ceriodaphnia sp., Experimental value)
Sodium Dichloroisocyanurate, Dihydrate (51580-86-0)	
LC50 fish 1	0.24 mg/l (EPA OTS 797.1400, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Read-across)
EC50 Daphnia 1	0.17 mg/l (ASTM, 48 h, Daphnia magna, Static system, Fresh water, Read-across)
ErC50 (algae)	> 100 mg/l (ISO 10253, 72 h, Skeletonema costatum, Static system, Experimental value)
Sodium Metasilicate Pentahydrate (10213-79-3)	
LC50 fish 1	210 mg/l (96 h, Brachydanio rerio)
EC50 Daphnia 1	216 mg/l (96 h, Daphnia magna)

12.2. Persistence and degradability

Sodium Tripoly LD (STPP) (7758-29-4)	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

Sodium Hydroxide (1310-73-2)	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable (inorganic)
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

Sodium Dichloroisocyanurate, Dihydrate (51580-86-0)	
Persistence and degradability	Readily biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Not readily biodegradable in water.
Chemical oxygen demand (COD)	0.01 g O ₂ /g substance

Sodium Metasilicate Pentahydrate (10213-79-3)	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

12.3. Bioaccumulative potential

Sodium Tripoly LD (STPP) (7758-29-4)	
Bioaccumulative potential	Not bioaccumulative.

Sodium Hydroxide (1310-73-2)	
Bioaccumulative potential	Not bioaccumulative.

Sodium Dichloroisocyanurate, Dihydrate (51580-86-0)	
Log Pow	-0.0556 (Anhydrous form, QSAR, KOWWIN)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

Sodium Metasilicate Pentahydrate (10213-79-3)	
Bioaccumulative potential	No bioaccumulation data available.

12.4. Mobility in soil

Sodium Hydroxide (1310-73-2)	
Ecology - soil	No (test)data on mobility of the substance available.

Sodium Dichloroisocyanurate, Dihydrate (51580-86-0)	
Log Koc	1.71 (log Koc, Calculated value)

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Sodium Dichloroisocyanurate, Dihydrate (51580-86-0)

Ecology - soil	Highly mobile in soil.
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12.5. Other adverse effects

Effect on the global warming : No known effects from this product.
GWPmix comment : No known effects from this product.

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 : UN1759 Corrosive solids, n.o.s., 8, III
UN-No.(DOT) : UN1759
Proper Shipping Name (DOT) : Corrosive solids, n.o.s.
Class (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136
Packing group (DOT) : III - Minor Danger
Hazard labels (DOT) : 8 - Corrosive



Dangerous for the environment : Yes
Marine pollutant : Yes



DOT Symbols : G - Identifies PSN requiring a technical name
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 100 kg
Emergency Response Guide (ERG) Number : 154
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

Sodium Tripoly LD (STPP) (7758-29-4)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

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Sodium Hydroxide (1310-73-2)	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory Not subject to reporting requirements of the United States SARA Section 313	
CERCLA RQ	1000 lb
Sodium Dichloroisocyanurate, Dihydrate (51580-86-0)	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
Sodium Metasilicate Pentahydrate (10213-79-3)	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	

15.2. International regulations

CANADA

Sodium Tripoly LD (STPP) (7758-29-4)	
Listed on the Canadian DSL (Domestic Substances List)	
Sodium Hydroxide (1310-73-2)	
Listed on the Canadian DSL (Domestic Substances List)	
Sodium Dichloroisocyanurate, Dihydrate (51580-86-0)	
Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)	
Sodium Metasilicate Pentahydrate (10213-79-3)	
Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)	

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

Sodium Tripoly LD (STPP) (7758-29-4)	
U.S. - Pennsylvania - RTK (Right to Know) List	
Sodium Hydroxide (1310-73-2)	
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List	
Sodium Dichloroisocyanurate, Dihydrate (51580-86-0)	
U.S. - Pennsylvania - RTK (Right to Know) List	

SECTION 16: Other information

Full text of H-phrases:

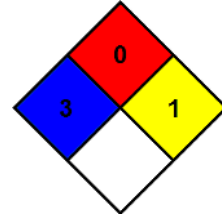
H290	May be corrosive to metals
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H400	Very toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects

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- NFPA health hazard : 3 - Materials that, under emergency conditions, can cause serious or permanent injury.
- NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.
- NFPA reactivity : 1 - Materials that in themselves are normally stable but can become unstable at elevated temperatures and pressures.



- Hazard Rating
- Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given
- Flammability : 0 Minimal Hazard - Materials that will not burn
- Physical : 1 Slight Hazard - Materials that are normally stable but can become unstable (self-react) at high temperatures and pressures. Materials may react non-violently with water or undergo hazardous polymerization in the absence of inhibitors.
- Personal protection : C
C - Safety glasses, Gloves, Synthetic apron

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