AgroFresh Inc.
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Shield Brite® Vacate

POSTHARVEST

SAFETY DATA SHEET

1. PRODUCT & COMPANY IDENTIFICATION

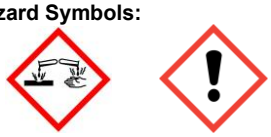
Product Name: Shield Brite® Vacate
Product Code: 10207
Product Use: Extra Heavy-Duty Fruit Cleaner
Product Restrictions: Agriculture Use Only
Manufacturer/Importer/Supplier/Distributor information
Manufacturer: Pace International, LLC
Address: 5661 Branch Road, Wapato, WA 98951
Phone Number: 800-936-6750 (Monday-Friday, 7:00 a.m. – 4:00 p.m.)
Medical Emergency Phone Number: 888-271-4649 (PROPHARMA)
Transportation Emergency Phone Number: 800-424-9300 (CHEMTREC)
Supplier: See above.

2. HAZARDS IDENTIFICATION

GHS Classification in accordance with 29 CFR 1910 (2012 OSHA Hazard Communication Standard)
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification:
Physical Hazard, Corrosive to metals, Category 1
Acute Toxicity-Oral, Category 4
Skin corrosion/irritation, Category 1A
Eye damage/eye irritation, Category 1
Environmental Hazards, Not classified

Hazard Symbols:



Signal Word:
DANGER

Hazard Statements:
H290 May be corrosive to metals.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H319 Causes serious eye irritation.

Precautionary Statements:
Prevention Statements:
P234 Keep only in original packaging.
P260 Do not breathe spray or mist.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear impermeable clothing, safety goggles or face shield and chemical resistant gloves.
Response Statements:
P390 Absorb spillage to prevent material damage.
P301/330/331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P317 Get medical help.
P302/361/354 IF ON SKIN: Take off immediately all contaminated clothing. Immediately rinse with water for several minutes.
P363 Wash contaminated clothing before reuse.
P305/351/338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337/317 If eye irritation persists: Get medical help.
P304/340 IF INHALED: Remover person to fresh air and keep comfortable for breathing.
P316 Get emergency medical help immediately.
P321 Specific treatment ss Section 4 First Aid Measures.
P310 Immediately call a POISON CENTER or doctor for medical advice.
Storage Statements:
P405 Store locked up.
P406 Store in corrosive resistant container with a resistant inner liner.
Disposal Statements:
P501 Dispose of contents/container should be made in accordance with applicable regional, national and local laws and regulations.

Other Hazards: None known.
Hazard(s) not otherwise classified (HNOC): None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Chemical name	CAS #	%
Sodium Hydroxide	1310-73-2	30 – 60 *
Potassium Hydroxide	1310-58-3	10 – 30 *
Glucopyranose, ollgomeric, decyl octyl glycosides	68515-73-1	0.5 – 1.5 *

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments *US GHS: The exact percentage (concentration) of composition has been

withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

4. FIRST AID MEASURES

General Advice:	Have the product container, label or Safety Data Sheet with you when calling a poison control center or physician or going for treatment. You may also contact PROPHARMA 1-888-271-4649 for emergency medical treatment information.
Inhalation:	IF INHALED: remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor for medical advice. .
Skin Contact:	IF ON SKIN: Take off immediately all contaminated clothing. Immediately rinse with water for several minutes. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or doctor for medical advice/attention.
Eye Contact:	IF IN EYES: Hold eye open and rinse cautiously and gently with water for 15 – 20 minutes. Remove contact lenses after the first 5 minutes if present and easy to do. Continue rinsing eye. Immediately call a POISON CENTER/doctor for medical advice/attention.
Ingestion:	IF SWALLOWED: Rinse mouth, DO NOT induce vomiting. Immediately call a POISON CENTER/doctor for medical advice/attention. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Never give anything by mouth if victim is unconscious or is convulsing.
Most important Symptoms / effects, acute and Delayed:	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Harmful if swallowed. Causes chemical burns to mouth, throat and stomach.
Indication of any immediate medical attention and special treatment needed:	Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to the affected area. Call an ambulance. Continue flushing during transport to hospital. Symptoms may be delayed. Treat patient symptomatically.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media:	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media:	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical:	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters:	Firefighters must wear full protective clothing including self-contained breathing apparatus
Firefighting equipment/instructions:	Use water spray to cool unopened containers and move containers from fire area if you can do so without risk.
Specific methods:	Use standard firefighting procedures and consider the hazards of other involved materials.
Hazardous combustion products:	May include and are not limited to: Oxides of carbon.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and Materials for Containment and Clean-Up:	Prevent entry into waterways, sewers, basements or confined areas. Large Spills: Stop the flow of material if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g., cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. HANDLING & STORAGE

Precautions for safe handling	DO NOT get in eyes, on skin or clothing. Do not breathe mist or vapor. When using, do not eat, drink or smoke. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment (see Section 8 of the SDS). Take off immediately all contaminated clothing and wash before reuse. Wash thoroughly after handling. Use good industrial hygiene practices in handling this material.
Conditions for safe storage, including any incompatibilities	Keep container tightly closed in a cool, dry, well-ventilated place. Store in a corrosion resistant container with a resistant inner liner. Store in tightly closed container, away from incompatible materials (see Section 10 of the SDS). Keep out of reach of children.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Sodium hydroxide (CAS# 1310-73-2)	PEL	2 mg/m3

US. ACGIH Threshold Limit Values

Components	Type	Value
Potassium hydroxide (CAS# 1310-58-3)	Ceiling	2 mg/m3
Sodium hydroxide (CAS# 1310-73-2)	Ceiling	2 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Potassium hydroxide (CAS# 1310-58-3)	Ceiling	2 mg/m3
Sodium hydroxide (CAS# 1310-73-2)	Ceiling	2 mg/m3

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls:	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection:	Wear safety glasses with side shields, goggles or face shield. Eye wash station and washing facilities should be available.
Skin protection	
Hand protection:	Impervious gloves. Confirm with reputable supplier first.
Other:	Wear appropriate chemical resistant clothing. As required by employer code.
Respiratory protection:	Respirator should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134)
Thermal hazards:	Not applicable.
General hygiene considerations:	Use good industrial hygiene practices in handling this material. Do not eat, drink or smoke when using this product. Routinely wash work clothing and protective equipment to remove contaminants.

9. PHYSICAL & CHEMICAL PROPERTIES

Physical state:	Liquid	**Upper/Lower flammability limits:**	Not available
Appearance / Color:	Clear, light brown, no particles	**Vapor pressure:**	Not available
Odor:	Odorless	**Vapor density: (air =1)**	Not available
Odor threshold:	Not available	**Specific Gravity: (H_2O = 1)**	1.385
pH:	>13	**Solubility:**	Soluble in water
Melting/Freezing point:	Not available	**Partition coefficient (n-octanol-water):**	Not available
Pour Point:	Not available	**Auto-ignition temperature:**	Not available
Initial boiling point and boiling range:	212°F (100°C)	**Decomposition temperature:**	Not available
Flash point:	Not flammable	**Viscosity:**	Not available
Evaporation rate:	Not available	**Explosive properties:**	Not explosive.
Flammability (solid, gas):	Not applicable	**Oxidizing properties:**	Not oxidizing.

10. STABILITY & REACTIVITY

Reactivity hazards:	May be corrosive to metals.
Possibility of Hazardous	No dangerous reaction known under conditions of normal use.

Reactions:

Chemical stability:	Material is stable under normal conditions.
Conditions to avoid:	Keep away heat, sparks, open flames and other ignition sources. Do not mix with other chemicals.
Incompatible materials:	Strong acids. Strong oxidizing agents. Metals.
Hazardous decomposition products:	May include and are not limited to: Oxides of carbon.

11. TOXICOLOGICAL INFORMATION

Routes of exposure:	Inhalation, Ingestion, Skin contact, Eye contact.
Information on likely routes of exposure	
Ingestion	Harmful if swallowed. Causes digestive tract burns.
Inhalation	May cause chemical burns.
Skin contact	Causes severe skin burns.
Eye contact	Causes serious eye damage.
Symptoms related to the physical, chemical and toxicological characteristics:	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Information on toxicological effects

Acute toxicity

Components	**Species**	**Test Results**
Glucopyranose, oligomeric, decyl octyl glycosides (CAS 68515-73-1)		
Acute		
Dermal		
LD50	Rabbit	>2000 mg/kg, 24 hours, ECHA
Inhalation		
LC50	Not available	
Oral		
LD50	Rat	>5000 mg/kg, ECHA
Potassium hydroxide (CAS 1310-58-3)		
Acute		
Dermal		
LD50	Rat	>1260 mg/kg, CCOHS
Inhalation		
LC50	Not available	
Oral		
LD50	Rat	333 mg/kg, ECHA

Skin corrosion/irritation:	Causes severe skin burns.
Exposure minutes	Not available
Erythema value	Not available
Oedema value	Not available
Serious eye damage/eye irritation:	Causes serious eye damage.
Corneal opacity value	Not available
Iris lesion value	Not available
Conjunctival reddening value	Not available
Conjunctival oedema value	Not available
Recover days	Not available
Respiratory sensitization:	Not a respiratory sensitizer.
Skin sensitization:	This product is not expected to cause skin sensitization.
Mutagenicity:	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic
Carcinogenicity:	Not classifiable as to carcinogenicity to humans.
California Proposition 65 - CRT: Listed date/Carcinogenic substance	1,4-Dioxane (CAS 123-91-1) Acetaldehyde (CAS 75-07-0) Ethylene oxide (CAS 75-21-8)
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052):	Not listed
Reproductive toxicity:	This product is not expected to cause reproductive or developmental effects.
Teratogenicity:	Not available.
Specific target organ toxicity - single exposure:	Not classified.
Specific target organ toxicity - repeated exposure:	Not classified.
Aspiration hazard:	Not an aspiration hazard.
Chronic effects:	Prolonged inhalation may be harmful.

12. ECOLOGICAL INFORMATION

Ecotoxicity See below

Ecotoxicological data

Components		Species	Test Results
Potassium hydroxide (CAS# 1310-58-3)			
Aquatic			
Fish	LC50	Western mosquitofish (Gambusia affinis)	80 mg/L, 96 hours
Sodium hydroxide (CAS 1310-73-2)			
Aquatic			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	34.59 – 47.13 mg/L, 48 hours
Fish	LC50	Western mosquitofish (Gambusia affinis	125 mg/L, 96 hours

Persistence/ degradability: No data is available on the degradability of any ingredients in the mixture.
Bioaccumulative potential No data available.
Mobility in soil: No data available.
Mobility in general: Not available.
Other adverse effects: No other adverse environmental effects (e.g., ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. DISPOSAL CONSIDERATIONS

Disposal instructions: Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal Regulations: Dispose in accordance with all applicable regulations.
Hazardous waste code: This material, in its original form and strength, would be designated as a D002 a federal hazardous waste for corrosivity when disposed.
Waste from residues / unused products: Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see Disposal instructions).
Contaminated packaging: Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

Transport of Dangerous Goods (TDG) Proof of Classification Classification method: Classified according to Part 2, sections 2.1-2.8 of the Regulations for the transport of dangerous goods. If applicable, the technical name and product classification will appear below.

	U.S. Department of Transportation (DOT)	IATA; IMDG; TDG
UN number:	UN1719	UN1719
Proper shipping name:	Caustic alkali liquids, n.o.s.	Caustic alkali liquids, n.o.s.
Technical name:	Sodium hydroxide	Sodium hydroxide
Technical name:	Potassium hydroxide	Potassium hydroxide
Hazard class(es):	8	8
Packaging Group:	II	II

15. REGULATORY INFORMATION

US FEDERAL REGULATIONS This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Potassium hydroxide (CAS# 1310-58-3)	Listed.
Sodium hydroxide (CAS# 1310-73-2)	Listed.

SARA 304 Emergency release notification
Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)
Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance	No
SARA 311/312 Hazardous chemical	Yes
Classified hazard Categories	Corrosive to metal Acute toxicity (any route of exposure) Skin corrosion or irritation Serious eye damage or eye irritation

SARA 313 (TRI reporting) Not regulated.

OTHER FEDERAL REGULATIONS

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

US STATE REGULATIONS

US - California Hazardous Substances (Director's): Listed substance

Potassium hydroxide (CAS# 1310-58-3)	Listed
Sodium hydroxide (CAS# 1310-73-2)	Listed

US - Illinois Chemical Safety Act: Listed substance

Potassium hydroxide (CAS# 1310-58-3)	
Sodium hydroxide (CAS# 1310-73-2)	

US - Louisiana Spill Reporting: Listed substance

Potassium hydroxide (CAS# 1310-58-3)	Listed
Sodium hydroxide (CAS# 1310-73-2)	Listed

US - Minnesota Haz Subs: Listed substance

Potassium hydroxide (CAS# 1310-58-3)	Listed
Sodium hydroxide (CAS# 1310-73-2)	Listed

US - Texas Effects Screening Levels: Listed substance

Potassium hydroxide (CAS# 1310-58-3)	Listed
Sodium hydroxide (CAS# 1310-73-2)	Listed

US. Massachusetts RTK - Substance List

Potassium hydroxide (CAS# 1310-58-3)	
Sodium hydroxide (CAS# 1310-73-2)	

US. New Jersey Worker and Community Right-to-Know Act

Potassium hydroxide (CAS# 1310-58-3)	
Sodium hydroxide (CAS# 1310-73-2)	

US. Pennsylvania Worker and Community Right-to-Know Law

Potassium hydroxide (CAS# 1310-58-3)	
Sodium hydroxide (CAS# 1310-73-2)	

US. Rhode Island RTK

Potassium hydroxide (CAS# 1310-58-3)	
Sodium hydroxide (CAS# 1310-73-2)	

US. California Proposition 65

WARNING: This product can expose you to chemicals including Ethylene oxide, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

US. California Proposition 65 - CRT: Listed date/Carcinogenic substance

1,4-Dioxane (CAS# 123-91-1)	Listed: January 1, 1988
Acetaldehyde (CAS# 75-07-0)	Listed: April 1, 1988
Ethylene oxide (CAS# 75-21-8)	Listed: July 1, 1987

US. California Proposition 65 - CRT: Listed date/Developmental toxin

Ethylene glycol (CAS# 107-21-1)	Listed: June 19, 2015
Ethylene oxide (CAS# 75-21-8)	Listed: August 7, 2009

US. California Proposition 65 - CRT: Listed date/Female reproductive toxin

Ethylene oxide (CAS# 75-21-8)	Listed: February 27, 1987

US. California Proposition 65 - CRT: Listed date/Male reproductive toxin

Ethylene oxide (CAS# 75-21-8)	Listed: August 7, 2009

Inventory status

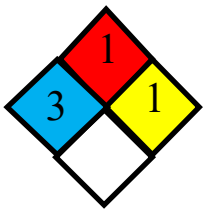
Country(s) or region	Inventory name	On inventory (yes/no) *
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. OTHER INFORMATION

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

HEALTH	**3**
FLAMMABILITY	**1**
PHYSICAL HAZARD	**1**
PERSONAL PROTECTION	**X**



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This Safety Data Sheet (SDS) may provide more information than the product label but does not replace or modify the product labeling (attached to and accompanying the product container). The product SDS and the product label both provide consistent and important health, safety, and environmental information as required by the Occupational Health and Safety Act (29 CFR 1910.1200, "Hazcom"). This requirement covers employers, employees, emergency responders, users and others handling the product. All necessary hazard classification and appropriate precautionary, use, storage, and disposal information are set forth on the labeling and the SDS.

SDS preparation date: September 23, 2025
Changes since last revision: Rebranding

Replaces MSDS dated: November 29, 2023
Version: 3