

**SAFETY DATA SHEET**

**1. PRODUCT & COMPANY IDENTIFICATION**

**Product Name:** Natural Shine<sup>®</sup> 320-OR  
**Product Code:** 10085  
**Product Use:** Coating for organically grown fruit  
**Product**  
**Restrictions:** For Agriculture Use Only  
**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/PROSAR)  
**Transportation Emergency Phone Number:** 800-424-9300 (CHEMTREC)

**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, Flammable liquid, Category 3  
Skin irritation, Category 2  
Eye irritation, Category 2A

**Hazard Symbols:**



**Signal Word:**  
WARNING

**Hazard Statements:**  
H226 Flammable liquid and vapor.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.

**Precautionary Statements**

**Prevention Statements:**  
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
P233 Keep container tightly closed.  
P240 Ground/Bond container and receiving equipment.  
P241 Use explosion-proof electrical/ventilating/lighting/equipment.  
P242 Use only non-sparking tools.  
P243 Take precautionary measures against static discharge.  
P280 Wear protective clothing, chemical resistant gloves, and safety glasses.  
P264 Wash hands thoroughly after handling.

**Response Statements:**

P303/361/353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P370/378 In case of fire: Use dry chemical, CO<sub>2</sub> to extinguish.  
P302/352 IF ON SKIN: Wash with plenty of soap and water.  
P321 Specific Treatment: see section 4 First Aid Measures.  
P332/313 If skin irritation occurs: Get medical advice/attention.  
P362/364 Take off contaminated clothing and wash it 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.  
P337/313 If eye irritation persists: Get medical advice/attention.

**Storage Statements:**

P403/233/235 Store in a well-ventilated place. Keep container tightly closed. Keep cool.

**Disposal Statements:**

P501 Dispose of contents/container should be made in accordance with applicable regional, national and local laws and regulations.

**Other Hazards:**

**Hazard(s) not otherwise classified (HNOC):**

None known.

None known.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

<u>Ingredient</u>	<u>CAS #</u>	<u>Concentration (w/w %)</u>
Ethanol	64-17-5	9.7
Glycerol	56-81-5	4.2
Sodium Hydroxide	1310-73-2	0.7
Other ingredients*	Balance	85.4

\*Other Ingredients not identified are trade secrets and non-hazardous.



#### 4. FIRST AID MEASURES

<b>General Advice:</b>	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 (PROSAR) 1-888-271-4649 for emergency medical treatment information.
<b>If on Skin (or hair):</b>	Take off immediately all contaminated clothing. Wash skin with plenty of soap and water/shower. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
<b>If in Eyes:</b>	Hold eye open and rinse cautiously with water for 15 – 20 minutes. Remove contact lenses, after the first 5 minutes if present and easy to do, then continue rinsing eye. If eye irritation persists: Get medical advice/attention.
<b>If Ingested:</b>	Call a poison control center or doctor for treatment advice. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
<b>If Inhaled:</b>	Remove person to fresh air and keep comfortable for breathing. If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth, if possible. Skin irritation. May cause redness and pain. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.
<b>Most important Symptoms / effects, acute and Delayed: Indication of any immediate medical attention and special treatment needed:</b>	Treat patient symptomatically.

#### 5. FIRE FIGHTING MEASURES

<b>Suitable extinguishing media:</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media:</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical:</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters:</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions:</b>	Move containers from fire area if you can do so without risk.
<b>Specific methods:</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards:</b>	Flammable liquid and vapor.
<b>Hazardous combustion products:</b>	May include and are not limited to: Oxides of carbon.

#### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions, protective equipment and emergency procedures:</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. 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.
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<b>Containment / Clean-Up Methods:</b>	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical /ventilating /lighting/equipment. Use only non-sparking tools. Prevent entry into waterways, sewer, basements or confined areas. Wipe or mop up liquid, if any, and dispose properly. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions:</b>	DO NOT discharge effluent containing this product into sewer systems, lakes, streams, ponds, estuaries, oceans or other waters.

## 7. HANDLING & STORAGE

<b>Precautions for safe handling:</b>	Use good industrial hygiene practices in handling this material. Wash thoroughly after handling. Wear appropriate personal protective equipment (see Section 8 of the SDS). When using, do not eat, drink or smoke.
<b>Conditions for safe storage, including any incompatibilities:</b>	Do not handle or store near an open flame, heat or other sources of ignition. No smoking. Keep in original container. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical /ventilating /lighting /equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Store in a well-ventilated place. Keep cool. Keep container upright to prevent leakage. This product contains no preservatives, so use entire contents within 30 days of opening container. Do not contaminate water, food or feed by storage or disposal. Absorb spillage to prevent material damage. Store in locked location. Keep out of reach of children.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Components	Type	Value	
Ethanol (CAS 64-17-5)	PEL	1900 mg/m <sup>3</sup> 1000 ppm	
Glycerol (CAS 56-81-5)	PEL	5 mg/m <sup>3</sup> 15 mg/m <sup>3</sup>	Respirable fraction. Total dust.
Sodium hydroxide (CAS 1310-73-2)	PEL	2 mg/m <sup>3</sup>	

### US. ACGIH Threshold Limit Values

Components	Type	Value
Ethanol (CAS 64-17-5)	STEL	1000 ppm
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m <sup>3</sup>

### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Ethanol (CAS 64-17-5)	TWA	1900 mg/m <sup>3</sup> 1000 ppm
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m <sup>3</sup>

<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Exposure guidelines</b>	See above
<b>Appropriate engineering controls</b>	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

<b>Eye/face protection</b>	Wear chemical goggles or face shield. Eye fountain and washing facilities should be available.
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<b>Skin protection</b>	
<b>Hand protection</b>	Nitrile, neoprene, and vinyl (PVC) gloves or other impervious gloves.
<b>Other</b>	Use of protective clothing (long sleeve shirt and pants).
<b>Respiratory protection</b>	Not normally required. A NIOSH-approved respirator with cartridges for organic vapor is recommended when exposure guideline levels may be exceeded.
<b>Thermal hazards</b>	Not applicable.
<b>General hygiene considerations</b>	Use good industrial hygiene practices in handling this material. When using do not eat, drink, or smoke. Wash thoroughly after handling.

## 9. PHYSICAL & CHEMICAL PROPERTIES

<b>Physical state:</b>	Liquid	<b>Upper/Lower flammability limits:</b>	Not available
<b>Appearance:</b>	Clear orange/amber	<b>Vapor pressure:</b>	Not available
<b>Odor:</b>	Slightly alcoholic	<b>Vapor density: (air =1)</b>	Not available
<b>Odor threshold:</b>	Not available	<b>Specific Gravity: (H<sub>2</sub>O = 1)</b>	1.02
<b>pH:</b>	7.1	<b>Solubility:</b>	Miscible with water
<b>Melting/Freezing point:</b>	Not available	<b>Partition coefficient (n-octanol-water):</b>	Not available
<b>Pour Point</b>	Not available	<b>Auto-ignition temperature:</b>	Not available
<b>Initial boiling point and boiling range:</b>	212°F (100°C)	<b>Decomposition temperature:</b>	Not available
<b>Flash point:</b>	117°F (47°C)	<b>Viscosity:</b>	4.5 Ostwald (200 CPS)
<b>Evaporation rate:</b>	Not available	<b>Explosive properties</b>	Not explosive.
<b>Flammability (solid, gas):</b>	Not applicable	<b>Oxidizing properties</b>	Not oxidizing.

## 10. STABILITY & REACTIVITY

<b>Reactivity hazards:</b>	This product may react with strong oxidizing agents.
<b>Possibility of hazardous reactions:</b>	Hazardous polymerization does not occur.
<b>Chemical stability:</b>	Stable under recommended storage conditions.
<b>Conditions to avoid:</b>	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Do not mix with other chemicals.
<b>Incompatible materials:</b>	Strong oxidizing agents.
<b>Hazardous decomposition products:</b>	May include and are not limited to: Oxides of carbon.

## 11. TOXICOLOGICAL INFORMATION

<b>Routes of exposure</b>	Eye, Skin contact, Inhalation, Ingestion.	
<b>Information on likely routes of exposure</b>		
<b>Ingestion</b>	May cause stomach distress, nausea or vomiting.	
<b>Inhalation</b>	Prolonged inhalation may be harmful.	
<b>Skin contact:</b>	Causes skin irritation.	
<b>Eye contact:</b>	Causes serious eye irritation.	
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.	
<b>Information on toxicological effects</b>		
<b>Acute toxicity</b>		
<b>Components</b>	<b>Species</b>	<b>Test Results</b>
Ethanol (CAS 64-17-5)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	> 15,800 mg/kg
<i>Inhalation</i>		



LC50	Mouse	39 mg/L, 4 Hours 31623 ppm, 4 Hours 20000 ppm, 10 Hours 64.1 mg/l/4h/4h
<i>Oral</i> LD50	Dog Guinea pig Mouse Rat	5500 mg/kg 5600 mg/kg 3450 mg/kg 7060 mg/kg
<b>Components</b> Glycerol (CAS 56-81-5)	<b>Species</b>	<b>Test Results</b>
<b>Acute</b> <i>Dermal</i> LD50	Guinea pig Rabbit	45 ml/kg, Days, ECHA >10000 mg/kg, SIGMA ALDRICH 23000 mg/kg, CCOHS
<i>Inhalation</i> LC50	Rat	>570 mg/m <sup>3</sup> , 1 Hours, HSDB >143 mg/m <sup>3</sup> , 4 Hours, CCOHS 4655 mg.min/l, 7 Hours, ECHA
<i>Oral</i> LD50	Guinea pig Mouse  Rat	>10000 mg/kg, ECHA 23000 mg/kg, CCOHS 20.8 ml/kg, ECHA >12600 mg/kg, SIGMA ALDRICH 27200 mg/kg, CCOHS 18300 mg/kg, ECHA
<b>Components</b> Sodium hydroxide (CAS 1310-73-2)	<b>Species</b>	<b>Test Results</b>
<b>Acute</b> <i>Dermal</i> LD50	Not available	
<i>Inhalation</i> LC50	Not available	
<i>Oral</i> LD50	Not available	
<b>Skin corrosion/irritation:</b>	Causes skin irritation.	
<b>Serious eye damage/eye Irritation:</b>	Causes serious eye irritation.	
<b>Respiratory sensitization:</b>	Not a respiratory sensitizer.	
<b>Skin sensitization:</b>	This product is not expected to cause skin sensitization.	
<b>Germ cell mutagenicity:</b>	Non-hazardous by WHMIS/OSHA criteria.	
<b>Carcinogenicity:</b>	Non-hazardous by WHMIS/OSHA criteria.	
<b>US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	Not Listed	
<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects. Non-hazardous by WHMIS/OSHA criteria.	
<b>Teratogenicity:</b>	Non-hazardous by WHMIS/OSHA criteria.	
<b>Specific target organ toxicity - single exposure:</b>	Not classified.	
<b>Specific target organ toxicity - repeated exposure:</b>	Not classified.	
<b>Aspiration hazard:</b>	Material does not present an aspiration hazard.	
<b>Chronic effects:</b>	Prolonged inhalation may be harmful.	



## 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	See below		
<b>Ecotoxicological data</b>			
<b>Components</b>		<b>Species</b>	<b>Test Results</b>
Ethanol (CAS 64-17-5)	EC50	Daphnia	11744.5 mg/L, 48 Hours
<b>Aquatic</b>			
Crustacea	EC50	Water flea ( <i>Daphnia pulex</i> )	7.7 - 11.2 mg/L, 48 hours
Fish	LC50	Fathead minnow ( <i>Pimephales promelas</i> )	> 100 mg/L, 96 hours
Glycerol (CAS 56-81-5)			
<b>Aquatic</b>			
Fish	LC50	Rainbow trout, donaldson trout ( <i>Oncorhynchus mykiss</i> )	51000 - 57000 mg/L, 96 hours
Sodium hydroxide (CAS 1310-73-2)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea ( <i>Ceriodaphnia dubia</i> )	34.59 - 47.13 mg/L, 48 hours
Fish	LC50	Western mosquitofish ( <i>Gambusia affinis</i> )	125 mg/L, 96 hours
<b>Persistence/ degradability:</b>	No data is available on the degradability of this product.		
<b>Bioaccumulative potential</b>			
<b>Mobility in soil:</b>	No data available.		
<b>Mobility in general:</b>	Not available.		
<b>Other adverse effects:</b>	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

<b>Disposal methods:</b>	Recover or recycle if possible. Do not discharge into sewers, lakes, streams, or other bodies of water. Disposal should be made in accordance with applicable regional, national and local laws and regulations. Consult appropriate regulatory officials for information on disposal, keeping in mind that local regulations may be more stringent than regional or national requirements.
<b>Waste from residues / unused products:</b>	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).
<b>Contaminated Packaging:</b>	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

<b>U.S. Department of Transportation (DOT)</b>	
	<u>DOT</u>
<b>UN number:</b>	UN1170
<b>Proper shipping name:</b>	Flammable Liquid, n.o.s. (Ethanol)
<b>Hazard class(es):</b>	3
<b>Packing group:</b>	III
<b>Marine Pollutant:</b>	No

## 15. REGULATORY INFORMATION

<b>US FEDERAL REGULATIONS</b>	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
<b>Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List</b>	Not regulated.
<b>Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)</b>	Not regulated.



**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Sodium hydroxide (CAS 1310-73-2) Listed

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

Hazard Categories

Immediate Hazard - Yes  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

No

**SARA 311/312 Hazardous chemical**

No

**SARA 313 (TRI reporting)**

Not regulated.

**US STATE REGULATIONS**

**US - California Hazardous Substances (Director's):**

Ethanol (CAS 64-17-5) Listed

Sodium hydroxide (CAS 1310-73-2) Listed

**US - Illinois Chemical Safety Act: Listed substance**

Ethanol (CAS 64-17-5) Listed

Sodium hydroxide (CAS 1310-73-2) Listed

**US - Louisiana Spill Reporting: Listed substance**

Ethanol (CAS 64-17-5) Listed

Sodium hydroxide (CAS 1310-73-2) Listed

**US - Minnesota Haz Subs: Listed substance**

Ethanol (CAS 64-17-5) Listed

Glycerol (CAS 56-81-5) Listed

Sodium hydroxide (CAS 1310-73-2) Listed

**US - New Jersey RTK - Substances: Listed substance**

Ethanol (CAS 64-17-5) Listed

Glycerol (CAS 56-81-5) Listed

Sodium hydroxide (CAS 1310-73-2) Listed

**US - Texas Effects Screening Levels: Listed substance**

Ethanol (CAS 64-17-5) Listed

Glycerol (CAS 56-81-5) Listed

**US. Massachusetts RTK - Substance List**

Ethanol (CAS 64-17-5) Listed

Glycerol (CAS 56-81-5) Listed

Sodium hydroxide (CAS 1310-73-2) Listed

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

Ethanol (CAS 64-17-5) Listed

Glycerol (CAS 56-81-5) Listed

Sodium hydroxide (CAS 1310-73-2) Listed

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

Ethanol (CAS 64-17-5) Listed

Glycerol (CAS 56-81-5) Listed

Sodium hydroxide (CAS 1310-73-2) Listed

**US. Rhode Island RTK**

Ethanol (CAS 64-17-5) Listed

Glycerol (CAS 56-81-5) Listed

Sodium hydroxide (CAS 1310-73-2) Listed

**US. California Proposition 65**

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

Ethanol (CAS 64-17-5) Listed: April 29, 2011

Listed: July 1, 1988

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

Ethanol (CAS 64-17-5) Listed: October 1, 1987



**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**

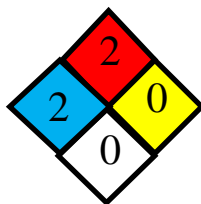
HMIS Ratings:

Health – 2

Flammability – 2

Reactivity – 0

NFPA Ratings:



The information provided in this Safety Data Sheet (SDS) is provided in good faith and believed to be accurate at the time of preparation of the SDS. However, Pace International, LLC and its subsidiaries or affiliates extend no warranties, make no representations, and assume no responsibility as to the accuracy, suitability, or completeness of such information. Additionally, neither Pace International, LLC nor any of its subsidiaries or affiliates represents or guarantees that this information or product may be used without infringing the intellectual property rights of others. It is the users' own responsibility to determine the suitability of this information for their own particular use of this product. If necessary, contact Pace International, LLC to confirm that you have the most current product label and SDS.

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 is set forth on the labeling and the SDS.

SDS preparation date: January 10, 2018

Replaces SDS dated: June 19, 2017

Version No. 4

Changes since last revision: Flammable status, Section 2,4,5,6,7,9,10,14

