

## 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  
 Health hazards, Not classified  
 Environmental hazards, Not classified

**Hazard Symbols:**



**Signal Word:**  
 WARNING

**Hazard Statements:**  
 H226 Flammable liquid and vapor.

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

**Supplemental information**

**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.

**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.

**Storage Statements:**

P403/235 Store in a well-ventilated place. Keep cool.

**Disposal Statements:**

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

None known.

None known.

None.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS #	Concentration (w/w %)
Ethanol	64-17-5	5 – 10*
Glycerol	56-81-5	1 - 5*
Shellac, sodium salt	2227212-85-1	10 – 30*

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** 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)  
**Advice:** 1-888-271-4649 for emergency medical treatment information.



<b>If Inhaled:</b>	If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.
<b>If on Skin (or hair):</b>	Take off immediately all contaminated clothing. Wash skin with plenty of soap and water/shower.
<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>	Rinse mouth. Do NOT induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.
<b>Most important Symptoms / effects, acute and Delayed:</b>	Direct contact with eyes may cause temporary irritation.
<b>Indication of any immediate medical attention and special treatment needed:</b>	Treat patient symptomatically.

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## 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>	Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. 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>	In case of fire and/or explosion do not breathe fumes. 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.

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## 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. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<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. Use only non-sparking tools. This product is miscible in water.  Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading.



Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. 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:** DO NOT discharge effluent containing this product into sewer systems, lakes, streams, ponds, estuaries, oceans or other waters.

## 7. HANDLING & STORAGE

**Precautions for safe handling:** Do not handle or store near an open flame, heat or other sources of ignition. Protect material from direct sunlight. When using, do not eat, drink or smoke. Explosion-proof general and local exhaust ventilation. All equipment used when handling the product must be grounded. Take precautionary measures against static discharge. Use non-sparking tools and explosion-proof equipment. Avoid prolonged exposure. Wear appropriate personal protective equipment (see Section 8 of the SDS). Wash thoroughly after handling. Avoid contact with skin, eyes, or clothing. Use good industrial hygiene practices in handling this material.

**Conditions for safe storage, including any incompatibilities:** Keep away from heat/sparks/open flames/hot surfaces. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry area at room temperature, well ventilated area, and away from direct sunlight. Keep in original container. Keep container tightly closed. Store away from incompatible materials (see Section 10 of the SDS). This product contains no preservatives, so use entire contents within 30 days of opening container. 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/m3 1000 ppm
Glycerol (CAS 56-81-5)	PEL	5 mg/m3 15 mg/m3
		Respirable fraction. Total dust.

### US. ACGIH Threshold Limit Values

Components	Type	Value
Ethanol (CAS 64-17-5)	STEL	1000 ppm

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

Components	Type	Value
Ethanol (CAS 64-17-5)	TWA	1900 mg/m3 1000 ppm

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Exposure guidelines** See above

**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 chemical goggles, safety glasses or face shield. Eye fountain and washing facilities should be available.

#### Skin protection

**Hand protection** Nitrile, neoprene, and vinyl (PVC) gloves or other impervious gloves.

**Other** Use of protective clothing (long sleeve shirt and pants).

**Respiratory protection** Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Respirator should be selected by and used under the direction of a trained health and safety professional following requirements found in



<b>Thermal hazards</b>	OSHA's respirator standard (29 CFR 1910.134) Not applicable.
<b>General hygiene considerations</b>	Use good industrial hygiene practices in handling this material. When using do not eat, drink, or smoke. Routinely wash work clothing and protective equipment to remove contaminants.

## 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>	No dangerous reaction known under conditions of normal use.
<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

**Routes of exposure** Inhalation, Eye, Skin contact, Inhalation, Ingestion.

**Information on likely routes of exposure**

<b>Ingestion</b>	May cause stomach distress, nausea or vomiting.
<b>Inhalation</b>	Prolonged inhalation may be harmful.
<b>Skin contact:</b>	No adverse effects due to skin contact are expected.
<b>Eye contact:</b>	Direct contact with eyes may cause temporary irritation.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Direct contact with eyes may cause temporary irritation.

**Information on toxicological effects**

**Acute toxicity**

Components	Species	Test Results
Ethanol (CAS 64-17-5)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	> 15,800 mg/kg
<i>Inhalation</i>		
LC50	Cat	85.4 mg/L, 4.5 Hours, ECHA 43.7 mg/L, 6 Hours, ECHA
	Mouse	> 60000 ppm, 60 Minutes, ECHA 79.4 mg/L, 134 Minutes, ECHA
	Rat	> 115.9 mg/L, 4 Hours, ECHA 31623 ppm, 4 Hours, HMIRA 20000 ppm, 10 Hours, HSDB 51.3 mg/L, 6 Hours, ECHA



<p><i>Oral</i> LD50</p>	<p>Dog Guinea pig Monkey Mouse  Pig Rat</p>	<p>5.5 g/kg, HSDB 5600 mg/kg, HSDB 6000 mg/kg 10500 ml/kg, ECHA 3450 mg/kg, SAX &gt; 5000 mg/kg, ECHA 1187 - 2769 mg/kg, ECHA 12400 mg/kg, ECHA 10470 mg/kg, ECHA 7800 ml/kg, ECHA</p>
<p><b>Components</b> Glycerol (CAS 56-81-5) <b>Acute</b> <i>Dermal</i> LD50  <i>Inhalation</i> LC50  <i>Oral</i> LD50</p>	<p><b>Species</b>  Guinea pig Rabbit  Rat  Guinea pig Mouse  Rat</p>	<p><b>Test Results</b>  45 ml/kg, Days, ECHA &gt;10000 mg/kg, SIGMA ALDRICH 23000 mg/kg, CCOHS  &gt;570 mg/m<sup>3</sup>, 1 Hours, HSDB &gt;143 mg/m<sup>3</sup>, 4 Hours, CCOHS 4655 mg.min/l, 7 Hours, ECHA  &gt;10000 mg/kg, ECHA 23000 mg/kg, CCOHS 20.8 ml/kg, ECHA &gt;12600 mg/kg, SIGMA ALDRICH 27200 mg/kg, CCOHS 18300 mg/kg, ECHA</p>
<p><b>Skin corrosion/irritation:</b> <b>Serious eye damage/eye Irritation:</b> <b>Respiratory sensitization:</b> <b>Skin sensitization:</b> <b>Germ cell mutagenicity:</b>  <b>Carcinogenicity:</b> <b>US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>  <b>Reproductive toxicity</b> <b>Teratogenicity:</b> <b>Specific target organ toxicity - single exposure:</b> <b>Specific target organ toxicity - repeated exposure:</b> <b>Aspiration hazard:</b> <b>Chronic effects:</b></p>	<p>Prolonged skin contact may cause temporary irritation. Direct contact with eyes may cause temporary irritation.  Not a respiratory sensitizer. This product is not expected to cause skin sensitization. No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic See below Not Listed This product is not expected to cause reproductive or developmental effects. Not available. Not classified.  Not classified.  Material does not present an aspiration hazard. Prolonged inhalation may be harmful.</p>	

## 12. ECOLOGICAL INFORMATION

<p><b>Ecotoxicity</b> <b>Ecotoxicological data</b> <b>Components</b> Ethanol (CAS 64-17-5) Crustacea <b>Aquatic</b> Crustacea Fish  Glycerol (CAS 56-81-5) <b>Aquatic</b> Fish</p>	<p>See below  <b>Species</b>  EC50 EC50 LC50  LC50</p>	<p><b>Test Results</b>  Daphnia Water flea (Daphnia pulex) Fathead minnow (Pimephales promelas)  Rainbow trout,donaldson trout (Oncorhynchus mykiss)</p>	<p>11744.5 mg/L, 48 Hours 7.7 - 11.2 mg/L, 48 hours &gt; 100 mg/L, 96 hours 51000 - 57000 mg/L, 96 hours</p>
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<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>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Local disposal regulations:</b>	Dispose of in accordance with local regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<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

**Transport of Dangerous Goods (TDG) Proof of Classification** Classification Method: Classified as per Part 2, Sections 2.1 – 2.8 of the Transportation of Dangerous Goods Regulations. If applicable, the technical name and the classification of the product will appear below.

**U.S. Department of Transportation (DOT)**



**DOT**

<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>Special provisions</b>	24, B1, IB3, T2, TP1
<b>Packaging non bulk</b>	203
<b>Packaging bulk</b>	242

### 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)**

Not 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 - Yes  
Pressure Hazard - No  
Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

No

**SARA 311/312 Hazardous chemical**

No

**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**

<b>US - California Hazardous Substances (Director's):</b>		
Ethanol (CAS 64-17-5)		Listed
<b>US - Illinois Chemical Safety Act: Listed substance</b>		
Ethanol (CAS 64-17-5)		Listed
<b>US - Louisiana Spill Reporting: Listed substance</b>		
Ethanol (CAS 64-17-5)		Listed
<b>US - Minnesota Haz Subs: Listed substance</b>		
Ethanol (CAS 64-17-5)		Listed
Glycerol (CAS 56-81-5)		Listed
<b>US - New Jersey RTK - Substances: Listed substance</b>		
Ethanol (CAS 64-17-5)		Listed
Glycerol (CAS 56-81-5)		Listed
<b>US - Texas Effects Screening Levels: Listed substance</b>		
Ethanol (CAS 64-17-5)		Listed
Glycerol (CAS 56-81-5)		Listed
<b>US. Massachusetts RTK - Substance List</b>		
Ethanol (CAS 64-17-5)		Listed
Glycerol (CAS 56-81-5)		Listed
<b>US. New Jersey Worker and Community Right-to-Know Act</b>		
Ethanol (CAS 64-17-5)		Listed
Glycerol (CAS 56-81-5)		Listed
<b>US. Pennsylvania Worker and Community Right-to-Know Law</b>		
Ethanol (CAS 64-17-5)		Listed
Glycerol (CAS 56-81-5)		Listed
<b>US. Rhode Island RTK</b>		
Ethanol (CAS 64-17-5)		Listed
Glycerol (CAS 56-81-5)		Listed
<b>US. California Proposition 65</b>		
		Not listed

**Inventory status**

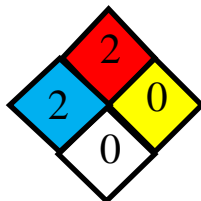
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*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:** July 27, 2018

**Replaces SDS dated:** May 16, 2018

**Version No.** 5

**Changes since last revision:** Section 2 – reclass, Section 3, 4,6,7,8,11,14,15 and 16

