

SAFETY DATA SHEET

1. PRODUCT & COMPANY IDENTIFICATION

Product Name: Natural Shine® SP
Product Code: 10326
Product Use: Coating for Sweet Potatoes
Product Restrictions: For 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/PROSAR)
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 Hazards: Not classified

Health Hazards:

Skin corrosion / irritation, Category 2A

Serious eye damage / eye irritation, Category 2

Environmental Hazards: Not classified

Hazard Symbols:



Signal Word:

WARNING

Hazard Statements:

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary Statements:

Prevention Statements:

P264 Wash hands thoroughly after handling.

P280 Wear protective clothing, chemical resistant gloves, and safety glasses.

Response Statements:

P302/352 IF ON SKIN: Wash with plenty of soap and water.
P321 Specific treatments see Section 4 First Aid Measures on SDS.

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:

Store in a cool, dry area at room temperature above 40°F and below 100°F. Do not allow this product to freeze. Keep container tightly closed and upright to prevent leakage and contamination. This product contains no preservatives, so use entire contents within 45 days of opening container.

Disposal Statements:

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

None known.

None.

Hazard(s) not otherwise classified (HNOC):

Other Hazards:

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Chemical name

CAS #

%

Morpholine

110-91-8

1 – 5*

Myristic Acid

544-63-8

0.1 – 1*

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

Composition

* US GHS: The exact percentage (concentration) of composition has been withheld as a trade

comments:

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, physician, or going for treatment. You may also contact PROPHARMA (PROSAR) 1-888-271-4649 for emergency medical treatment information.
Skin contact:	IF ON SKIN: Wash skin with plenty of soap and water/shower. If skin irritation occurs: Get medical advice/attention. Take off immediately all contaminated clothing. Wash before reuse.
Eye contact:	IF IN EYES: Hold eye open and rinse cautiously with water for 15 – 20 minutes. Remove contact lenses, if present, after the first 5 minutes if easy to do, then continue rinsing eye. If eye irritation persists: Get medical advice/attention.
Inhalation:	If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.
Ingestion:	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.
Inhalation:	If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.
Most important Symptoms / effects, acute and delayed	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.
Indication of any immediate medical attention and special treatment needed:	Treat patient symptomatically.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:	Treat for surrounding material.
Unsuitable Extinguishing Media:	Not available.
Special 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:	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 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:	Stop leak if you can do so without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Never return spills to original containers for re-use. Clean surface thoroughly to remove residual contamination. Following product recovery, flush area with water. Prevent entry into waterways, sewer, basements or confined areas. For waste disposal, see section 13 of the SDS.
Environmental Precautions:	Avoid discharge into drains, water courses or onto the ground. Do not discharge into lakes, streams, ponds or public waters.

7. HANDLING & STORAGE

Precautions for Safe Handling:	Use good industrial hygiene practices in handling this material. Do not get in eyes, on skin or on clothing. Wear appropriate personal protective equipment (see Section 8). Avoid breathing vapors or mists of this product. Avoid prolonged exposure. Use only with adequate ventilation. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.
Conditions for Safe Storage, including any Incompatibilities:	Store in a cool, dry area at room temperature above 40°F and below 100°F. Do not allow this product to freeze. Keep container tightly closed and upright to prevent leakage and contamination. This product contains no preservatives, so use entire contents within 45 days of opening container. Store 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
Morpholine (CAS# 110-91-8)	PEL	70 mg/m3 20 ppm
US. ACGIH Threshold Limit Values		
Components	Type	Value
Morpholine (CAS# 110-91-8)	TWA	20 ppm
US. NIOSH: Pocket Guide to Chemical Hazards		
Components	Type	Value
Morpholine (CAS# 110-91-8)	STEL	105 mg/m3 30 ppm
	TWA	70 mg/m3 20 ppm
Biological Limit Values: No biological exposure limits noted for the ingredients.		
Exposure Guidelines:		
US. ACGIH Threshold Limit Values: Skin designation		
Morpholine (CAS# 110-91-8)		Danger of cutaneous absorption.
US. NIOSH: Pocket Guide to Chemical Hazards : Skin designation		
Morpholine (CAS# 110-91-8)		Can be absorbed through the skin.
US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)		
Morpholine (CAS# 110-91-8)		Can be absorbed through the skin.
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 (or goggles). Eye wash station and washing facilities should be available.	
Skin protection		
Hand protection:	Wear nitrile, neoprene, vinyl (PVC), or rubber gloves.	
Other:	Wear protective clothing (long sleeved shirt, pants, and shoes).	
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 OSHA's respirator standard (29 CFR 1910.134)	
Thermal hazards:	Not applicable.	
General hygiene considerations:	Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.	

9. PHYSICAL & CHEMICAL PROPERTIES

Physical state:	Liquid	Upper/Lower flammability or exposure limits:	Not available
Appearance / Color:	Gray brown	Vapor pressure:	Not available
Odor:	Slightly waxy	Vapor density: (air =1)	Not available
Odor threshold:	Not available	Specific Gravity: (H₂O = 1)	1
pH:	9.2	Solubility:	Miscible in water

Melting/Freezing point:	Not available	Partition coefficient (n-octanol-water):	Not available
Initial boiling point and boiling range:	Not available	Auto-ignition temperature:	Not available
Flash point:	Not flammable	Decomposition temperature:	Not available
Evaporation rate:	Not available	Viscosity:	Not available
Flammability (solid, gas):	Not applicable	Explosive Properties:	Not explosive
		Oxidizing Properties:	Not oxidizing

10. STABILITY & REACTIVITY

Reactivity hazards:	This product may react with strong oxidizing agents.
Possibility of Hazardous Reactions:	Hazardous polymerization does not occur.
Chemical stability:	Material is stable under normal conditions.
Conditions to avoid:	Do not mix with other chemicals.
Incompatible materials:	Strong oxidizing agents.
Hazardous decomposition products:	May include and are not limited to: Oxides of carbon.

11. TOXICOLOGICAL INFORMATION

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

Information on likely routes of exposure

Ingestion	May cause stomach distress, nausea or vomiting.
Inhalation	Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity

Components	Species	Test Results
Morpholine (CAS# 110-91-8)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	500 mg/kg, 24 Hours, ECHA
<i>Inhalation</i>		
LC50	Rat	8 mg/L, ECHA
<i>Oral</i>		
LD50	Rat	1900 mg/kg, ECHA

Myristic acid (CAS# 544-68)

Acute		
<i>Dermal</i>		
LD50	Not available	
<i>Inhalation</i>		
LC50	Not available	
<i>Oral</i>		
LD50	Rat	>10000 mg/kg, HSDB

Skin corrosion/irritation: Causes skin irritation.

Exposure minutes Not available

Erythema value Not available

Oedema value Not available

Serious eye damage/eye irritation: Causes serious eye irritation.

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.

Germ cell mutagenicity: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic

Carcinogenicity: See below

IARC Monographs. Overall Evaluation of Carcinogenicity

Morpholine (CAS# 110-91-8)

Volume 47, Volume 71 - 3 Not classifiable as to carcinogenicity to humans.

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:	Non-hazardous by WHMIS/OSHA criteria.
Specific target organ toxicity - single exposure:	Not classified.
Specific target organ toxicity - repeated exposure:	Not classified.
Aspiration hazard:	Material does not present an aspiration hazard.
Chronic effects:	Prolonged inhalation may be harmful.

12. ECOLOGICAL INFORMATION

Ecotoxicity	See below	
Ecotoxicological data	Species	Test Results
Components		
Morpholine (CAS# 110-91-8)		
Aquatic		
Fish	LC50	Zebra danio (Danio rerio) >1 mg/L, 96 hours
Persistence/ degradability:	No data is available on the degradability of this product.	
Bioaccumulative potential:	Not available	
Mobility in soil:	Not 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. Disposal should be made in accordance with applicable regional, national and local laws and regulations.
Local disposal Regulations	Dispose of in accordance with local regulations.
Hazardous waste code	This product, in its original form and concentration, would not designate as a US federal hazardous waste 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)	Not regulated as dangerous goods.

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)	Morpholine (CAS# 110-91-8) 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**

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

Morpholine (CAS# 110-91-8)

Listed

US - Illinois Chemical Safety Act: Listed substance

Morpholine (CAS# 110-91-8)

US - Louisiana Spill Reporting: Listed substance

Morpholine (CAS# 110-91-8)

Listed

US - Minnesota Haz Subs: Listed substance

Morpholine (CAS# 110-91-8)

Listed

US - Texas Effects Screening Levels: Listed substance

Morpholine (CAS# 110-91-8)

Listed

Myristic acid (CAS# 544-63-8)

Listed

US. Massachusetts RTK - Substance List

Morpholine (CAS# 110-91-8)

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

Morpholine (CAS# 110-91-8)

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

Morpholine (CAS# 110-91-8)

US. Rhode Island RTK

Morpholine (CAS# 110-91-8)

US. California Proposition 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Inventory status

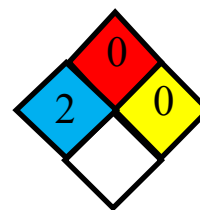
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

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

16. OTHER INFORMATION

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

HEALTH	2
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	X



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 are set forth on the labeling and the SDS.

SDS preparation date: September 23, 2025

Replaces SDS dated: September 14, 2020

Changes since last Rebranding

Version: 4

revision: